P-A STACKS

NOVEMBER 1983 NUMBER 471 -- Part II

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Solar-Geophysical Data comprehensive reports

Data for May 1983, & Miscellanea

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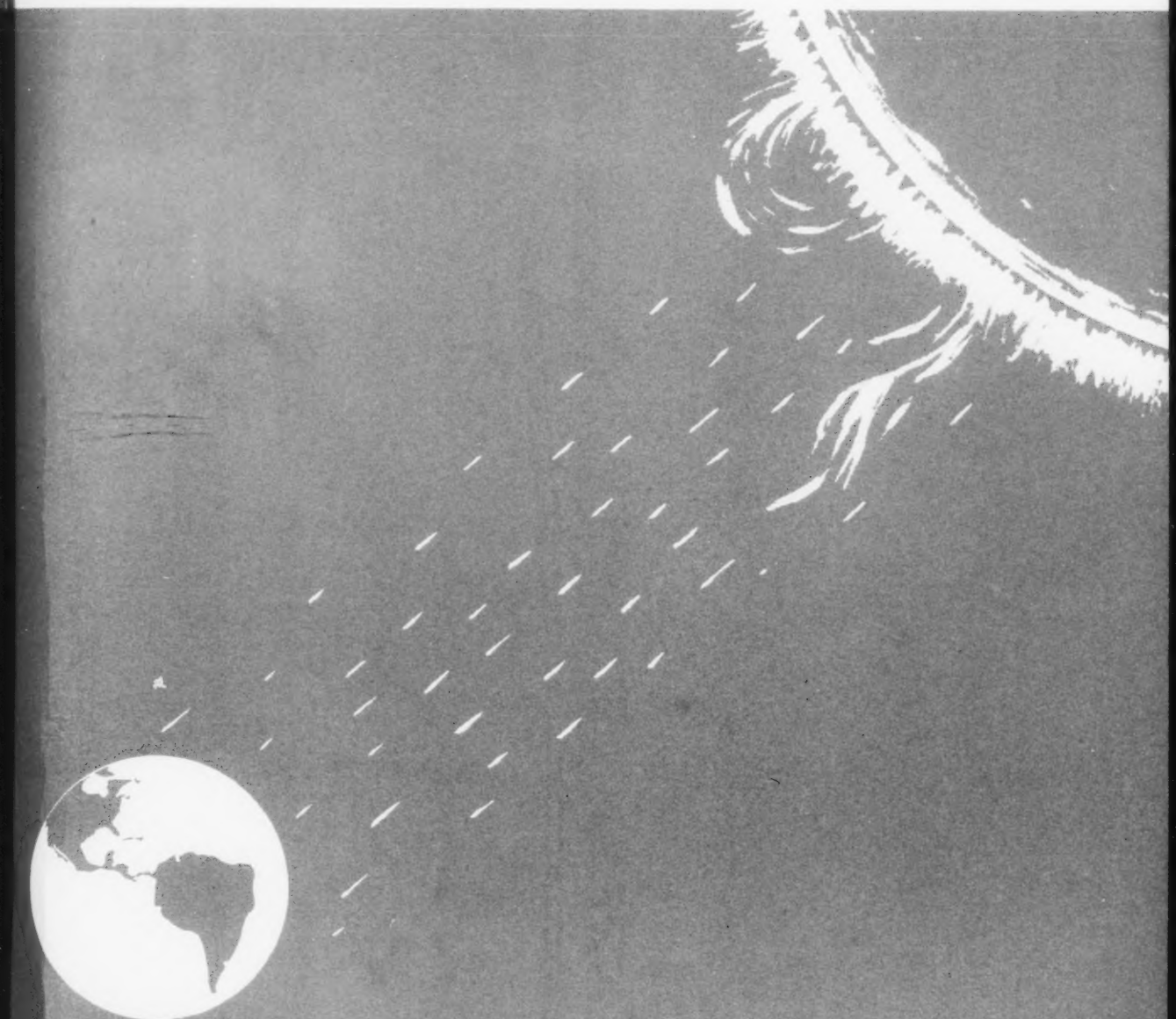

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Solar - Geophysical Data

Part II (Comprehensive Reports)

NO. 471 NOVEMBER 1983

DATA FOR
MAY 1983

Michael A. Chinnery, Director
NATIONAL GEOPHYSICAL DATA CENTER
BOULDER, COLORADO

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SOLAR-GEOPHYSICAL DATA

NUMBER 471

(Issued in Two Parts)

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*Solar radio noise bursts observed at Athens, Learmonth, Manila, Palehua and Sagamore Hill during Aug 1979 through Oct 1980 appear in SOLAR-GEOPHYSICAL DATA, No. 461, Part II, pages 103-235.

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OUTSTANDING OCCURRENCES

MAY 1983

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
01	260	ONDR	44	NS	0542.0E		438.0D	67.0			
	127	TORN	43	NS	0746.0	1118.3	446.0	30.0	1.0		V=1
	204	IZMI	43	NS	0900.0		180.0	2.0			
	245	PALE	43	NS	1637.0	2254.6	704.0D	219.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2100.0E		240.0D		7.0		
	200	HIRA	43	NS	2253.1	2255.3	630.0D	20.0	5.0		0
	245	LEAR	43	NS	2300.0	2304.0	642.0D	46.0			QL=5 ST=2 TYP=1
	3750	TYKW	45	C	0156.5	0157.1	3.5	3.0	1.5		
	3750	TYKW	29	PBI	0200.0		30.0	1.5	0.7		
	3750	TYKW	45	C	0254.0	0256.8	5.0	22.0	8.0		
	9395	PEKG	20	GRF	0255.0	0256.6	18.0D	11.9	8.3		
	9400	TYKW	45	C	0255.0	0256.6	15.0	13.0	8.0		
	2000	TYKW	45	C	0255.0	0257.3	4.0	6.0	2.5		
	2840	PEKG	3	S	0255.0	0257.3	3.0	15.5	9.3		
	9400	TYKW			0255.0	0302.0		10.0			
	4995	LEAR	4	S/F	0255.6	0256.6	3.2	30.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0256.3	0256.6	2.3	11.0			QL=6 ST=2 TYP=3
	2695	LEAR	4	S/F	0256.5	0257.1	2.3	13.0			QL=6 ST=2 TYP=3
	2840	PEKG	29	PBI	0258.0		25.0	6.5	4.5		
	3750	TYKW	29	PBI	0259.0		45.0	6.0	3.0		
	2000	TYKW	29	PBI	0259.0		45.0	2.5	1.5		
	9400	TYKW	29	PBI	0310.0		35.0	8.0	4.0		
	3750	TYKW	21	GRF	0350.0	0404.0	105.0	3.0	1.5		
	3750	TYKW	20	GRF	0424.0	0450.0	65.0	2.0	1.0		
	6100	KISV	1	S	0456.3	0457.1	4.0	4.0			
	3750	TYKW	20	GRF	0550.0	0610.0	70.0	2.0	1.0		
	650	GORK	22	GRF	0554.0	0933.0	234.0D	4.0	2.0		
	2000	TYKW	20	GRF	0555.0	0602.0	60.0	1.5	0.7		
	200	HIRA	8	S	0556.4	0556.7	.5	170.0			0
	2840	PEKG	45	C	0709.0	0719.2	13.0	131.0	42.6		
	3750	TYKW	45	C	0710.0	0718.8	12.0	62.0	14.0		
	2650	DWIN	4	S/F	0710.0	0719.0	15.0	120.0	5.0		
	2000	TYKW	45	C	0710.0	0719.1	15.0	100.0	16.0		
	2902	YUNN	45	C	0710.8	0719.1	49.2	113.0			
	2695	LEAR	47	GB	0711.1	0716.8	12.7	20.0			QL=6 ST=2 TYP=5
	1415	LEAR	47	GB	0711.3	0714.8	19.7	60.0			QL=5 ST=2 TYP=5
	1470	POTS	29	PBI	0712.0	0715.0	63.0	44.0			
	3000	POTS	29	PBI	0712.0	0719.0	61.0	76.0			
	9400	TYKW	20	GRF	0712.0U	0723.0U	80.0U	12.0	6.0		RAIN
	2950	GORK	21	GRF	0712.5	0721.2	84.7	15.0			
	3000	IZMI	7	C	0713.0	0719.2	12.0	93.0	40.0		
	950	GORK	20	GRF	0713.3	0718.8	55.7	5.5			
	1415	ATHN	4	S/F	0713.5	0714.0	8.8	41.0			QL=6 ST=3 TYP=3
	4995	LEAR	4	S/F	0713.6	0718.8	10.2	21.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0714.0	0718.7	10.0	8.0	3.0		
	1415	ATHN	4	S/F	0714.5	0715.0	8.8	41.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0714.8	0719.8	8.0	10.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	0715.5	0718.0	13.1	17.0			QL=6 ST=3 TYP=3
	8800	ATHN	4	S/F	0715.5	0718.8	13.1	11.0			QL=6 ST=3 TYP=3
	4995	ATHN	4	S/F	0716.5	0719.0	12.1	17.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	0716.5	0719.8	12.1	11.0			QL=6 ST=2 TYP=3
	3100	BERN	4	S/F	0716.6	0719.1	7.5	126.0			
	2950	GORK	46	C	0716.8	0717.3	4.4	52.0			
	5200	BERN	3	S	0716.8	0718.8	7.5	24.0			
	2950	GORK	46	C	0716.8	0719.0		64.0			
	6100	KISV	2	S/F	0716.9	0719.1	5.0	12.0			
	9500	POTS	20	GRF	0717.0	0725.0	58.0	8.0			
	9100	GORK	20	GRF	0717.1	0725.9	32.0	9.0	4.0		
	15400	LEAR	4	S/F	0718.5	0719.8	3.3	20.0			QL=6 ST=2 TYP=3
	3750	TYKW	29	PBI	0722.0		90.0	11.0	6.0		
	2840	PEKG	29	PBI	0722.0		33.0D	14.8	10.4		
	2000	TYKW	30	PBI	0725.0		80.0	8.0	4.0		
	2000	TYKW	5	S	0733.0	0737.4	10.0	1.5	0.5		
	245	LEAR	8	S	0736.1	0736.1	.2	15.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0736.1	0736.1	.2	21.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0803.6	0804.6	1.5	9.0			QL=5 ST=2 TYP=3
	4995	LEAR	8	S	0804.3	0804.6	.5	6.0			QL=5 ST=2 TYP=3
	2695	LEAR	8	S	0804.3	0804.6	.7	4.0			QL=5 ST=2 TYP=3
	15400	LEAR	8	S	0804.6	0804.8	.5	26.0			QL=5 ST=2 TYP=3
	6100	KISV	23	GRF	0907.7	0912.5	13.0	5.0			
	234	POTS	4	S/F	0914.9	0915.2	.4	165.0	8.0		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

MAY 1983

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
01	2840	PEKG	45	C	0929.0	0930.8	11.0	17.0	6.6		
	536	ONDR	8	S	0948.5	0948.5	.1	10.0			
	113	POTS	4	S/F	1117.9	1118.1	.4	110.0	15.0		III
	245	SGMR	47	GB	1124.0	1124.1	.5	63.0			QL=6 ST=2 TYP=5
	245	SGMR	49	GB	1136.0	1136.8	1.3	5700.0			QL=6 ST=2 TYP=6
	2800	OTTA	20	GRF	1149.0	1150.0	30.0	3.6	1.8		
	33	UPIC	42	SER	1155.1	1158.0	15.0				
	29	UPIC	42	SER	1155.2	1158.1	14.9				
	1415	ATHN	4	S/F	1303.1	1310.8	11.9	11.0			QL=6 ST=3 TYP=3
	8800	ATHN	4	S/F	1303.1	1313.8	17.4	11.0			QL=6 ST=3 TYP=3
	1415	ATHN	4	S/F	1304.1	1311.8	11.9	11.0			QL=6 ST=3 TYP=3
	8800	ATHN	4	S/F	1304.1	1314.8	18.4	11.0			QL=6 ST=3 TYP=3
	4995	ATHN	4	S/F	1308.1	1313.8	6.9	20.0			QL=6 ST=3 TYP=3
	4995	ATHN	4	S/F	1309.1	1314.8	6.9	20.0			QL=6 ST=3 TYP=3
	2800	OTTA	20	GRF	1310.0	1325.0	45.0	4.0	2.0		
	9500	POTS	20	GRF	1312.0	1318.5	53.0	12.0			
	3000	POTS	20	GRF	1312.0	1321.0	48.0	5.0			
	9400	HUAN	20	GRF	1312.8	1326.1	24.8	14.4	6.7		0
	2800	OTTA	20	GRF	1545.0	1547.0	11.0	3.8	1.3		
	2800	OTTA	260	FAL	1556.0	1603.0	7.0	-3.0	-1.5		
	9400	HUAN	20	GRF	1708.4	1728.3	39.1	5.8	2.7		0
	2800	OTTA	1	S	1714.8	1715.0	1.0	2.6	1.4		
	4995	SGMR	8	S	1714.8	1715.0	.3	24.0			QL=6 ST=2 TYP=3
	410	SGMR	4	S/F	1745.0	1746.3	3.0	19.0			QL=6 ST=2 TYP=3
	610	SGMR	4	S/F	1745.3	1746.6	3.0	15.0			QL=6 ST=2 TYP=3
	1415	SGMR	4	S/F	1745.6	1746.1	2.7	26.0			QL=6 ST=2 TYP=3
	245	SGMR	8	S	1745.8	1746.6	1.2	44.0			QL=6 ST=2 TYP=3
	245	SGMR	8	S	1756.8	1757.1	.5	40.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1757.6	1757.8	1.5	17.0			QL=6 ST=2 TYP=3
	1415	SGMR	47	GB	1757.6	1758.0	.7	61.0			QL=6 ST=2 TYP=5
	610	SGMR	8	S	1758.1	1758.1	.4	22.0			QL=6 ST=2 TYP=3
	2800	OTTA	23	GRF	1835.0	2335.0	420.0D	30.0			
	2800	OTTA	4	S/F	1836.0	1839.8	5.0	10.2	4.0		
	2800	OTTA	23	GRF	1836.0	1847.0	105.0	8.2	4.1		
	9400	HUAN	22	GRF	1836.6	1846.5U	24.4	12.9	7.8		R
	2695	SGMR	4	S/F	1837.3	1839.8	3.2	16.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1838.8	1839.8	1.5	27.0			QL=6 ST=2 TYP=3
	2800	OTTA	21	GRF	2041.0	2100.0	75.0	13.8	8.0		
	2800	OTTA	4	S/F	2044.5	2049.7	10.0	13.6	6.8		
	1415	SGMR	20	GRF	2045.6	2049.8	12.5	23.0			QL=6 ST=2 TYP=2
	2695	SGMR	20	GRF	2047.0	2049.6	3.0	22.0			QL=6 ST=2 TYP=2
	610	SGMR	20	GRF	2049.3	2049.6	.5	16.0			QL=6 ST=2 TYP=2
	9800	SGMR	20	GRF	2051.6	2051.8	.4	22.0			QL=6 ST=2 TYP=2
	2000	TYKW	28	PRE	2210.0	2253.0	43.0	6.0	3.0		
	1000	TYKW	28	PRE	2210.0	2253.0	43.0	4.0	2.0		
	3750	TYKW	28	PRE	2213.0	2253.0	40.0	7.0	3.0		
	9400	TYKW	28	PRE	2218.0	2253.0	35.0	5.0	2.5		
	500	HIRA	22	GRF	2238.4	2331.7	77.0	8.0	3.0		ML
	2695	PENT	4	S/F	2252.0	2258.0	13.0	27.0	14.6		
	500	HIRA	45	C	2252.6	2257.9	14.0	60.0	9.0		WL
	3750	TYKW	45	C	2253.0	2257.2	65.0	32.0	19.0		
	2000	TYKW	45	C	2253.0	2257.8	15.0	31.0	17.0		
	1000	TYKW	45	C	2253.0	2300.6	40.0	28.0	8.0		
	9400	TYKW	45	C	2253.0	2312.0	65.0	35.0	22.0		
	410	PALE	47	GB	2254.1	2254.6	8.9	63.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	2254.5	2254.6	.5	169.0			QL=6 ST=2 TYP=5
	8800	PALE	8	S	2254.5	2255.0	.6	15.0			QL=6 ST=2 TYP=3
	410	SGMR	4	S/F	2254.5	2255.3	5.1	34.0			QL=6 ST=2 TYP=3
	610	PALE	4	S/F	2254.5	2256.6	4.6	32.0			QL=6 ST=2 TYP=3
	1415	PALE	4	S/F	2254.5	2256.6	5.1	22.0			QL=6 ST=2 TYP=3
	610	SGMR	4	S/F	2254.5	2256.6	4.6	27.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	2254.6	2255.1	.7	160.0			QL=6 ST=2 TYP=5
	4995	PALE	8	S	2257.0	2257.1	.3	13.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	2303.8	2304.0	.3	46.0			QL=5 ST=2 TYP=3
	15400	LEAR	47	GB	2304.1E	2311.1	8.5D	50.0			QL=4 ST=2 TYP=5
	4995	LEAR	4	S/F	2304.3E	2310.1	10.0D	38.0			QL=4 ST=2 TYP=3
	15400	PALE	20	GRF	2304.6	2311.1	12.7	33.0			QL=6 ST=2 TYP=2
	8800	LEAR	4	S/F	2304.6E	2311.1	9.9D	40.0			QL=4 ST=2 TYP=3
	2695	PENT	29	PRI	2305.0	2305.0	25.0	8.9	4.1		
	8800	PALE	20	GRF	2305.1	2309.6	12.2	24.0			QL=6 ST=2 TYP=2
	2000	TYKW	29	PRI	2308.0		145.0	10.0	5.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
01	4995	PALE	8	S	2309.3	2311.3	2.0D	13.0			QL=6 ST=2 TYP=3
	1000	TYKW	29	PBI	2333.0		110.0	4.0	2.0		
	3750	TYKW	29	PBI	2358.0		100.0	11.0	5.0		
	9400	TYKW	29	PBI	2358.0		90.0	11.0	4.0		
02	100	GORK	44	NS	0300.0E		420.0D		5.0		
	260	ONDR	44	NS	0555.0E		495.5D	120.0D			
	204	IZMI	43	NS	0600.0		360.0	10.0			
	127	TORN	43	NS	0736.0		144.0		3.0		V=0
	200	HIRA	44	NS	1943.0E	2100.0	820.0D	3.0	1.5		ML
	100	HIRA	44	NS	1943.0E	2122.0	820.0D	100.0	25.0		
	208	VORO	44	NS	2100.0E		240.0D		9.0		
	245	LEAR	43	NS	2300.0	0215.1	641.0D	46.0			QL=6 ST=2 TYP=1
	1415	LEAR	8	S	0137.3	0137.6	.8	5.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	0137.5	0137.6	.6	7.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0137.5	0137.6	.6	13.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0137.5	0137.6	.3	6.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0137.5	0137.8	.6	23.0			QL=6 ST=2 TYP=3
	1000	TYKW	32	ABS	0320.0	0420.0	170.0	-2.0	-1.0		
	2000	TYKW	5	S	0327.0	0330.0	4.0	1.5	0.5		
	2000	TYKW	31	ABS	0331.0	0350.0	100.0	-4.0	-2.0		
	3750	TYKW	5	S	0332.0	0332.7	2.0	1.5	0.5		
	3750	TYKW	31	ABS	0334.0	0350.0	60.0	-5.0	-2.0		
	9400	TYKW	32	ABS	0335.0	0350.0	145.0	-3.0	-1.5		
	3750	TYKW	32	ABS	0518.0	0542.0	50.0	-2.0	-1.0		
	2000	TYKW	32	ABS	0521.0	0545.0	50.0	-2.0	-1.0		
	410	LEAR	8	S	0813.1	0813.1	.2	15.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0813.1	0813.1	.2	2.0			QL=6 ST=2 TYP=3
	245	LEAR	4	S/F	0813.1	0813.1	18.2	5.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0836.6	0836.8	.2	30.0			QL=6 ST=2 TYP=3
	204	IZMI	4	S/F	0907.0	0907.7	1.0	117.0	50.0		
	29	UPIC	4	S/F	1016.0	1016.9	.9U				
	33	UPIC	4	S/F	1016.4	1016.5	.8				
	113	POTS	41	F	1030.8	1030.9	.7	110.0	1.0		III
	3000	POTS	20	GRF	1209.0	1211.5	6.0	3.0			
	1470	POTS	23	GRF	1209.5	1211.5	8.0	6.0			
	9500	POTS	20	GRF	1210.0	1213.6	13.0	11.0			
	234	POTS	4	S/F	1345.1	1345.8	1.9	3600.0	400.0		III/V
	113	POTS	4	S/F	1345.7	1346.0	1.1	700.0	60.0		III/V
	410	SGMR	47	GB	1359.6	1400.1	1.7	83.0			QL=6 ST=2 TYP=5
	930	BORD	46	C	1400.0	1400.1	.4	93.0	7.0		
	9400	HUAN	20	GRF	1533.1	1558.8	63.1	9.0	3.1		0
	2800	OTTA	8	S	1555.6	1555.6	.1	3.8			
	930	BORD	42	SER	1555.6	1558.2	8.3	333.0	2.0		
	2800	OTTA	8	S	1558.0	1558.0	.5	3.8			
	1415	SGMR	8	S	1558.0	1558.1	.6	13.0			QL=6 ST=2 TYP=3
	610	SGMR	49	GB	1558.0	1558.1	.6	1800.0			QL=6 ST=2 TYP=6
	410	SGMR	47	GB	1558.0	1558.1	.5	410.0			QL=6 ST=2 TYP=5
	2800	OTTA	27A	RF	1705.0		395.0	6.0	4.5		
	2800	OTTA	24	R	1705.0	1840.0	95.0	6.0	2.0		
	2800	OTTA	3	S	1829.5	1831.5	5.0	15.2	5.1		
	9400	HUAN	2	S/F	1829.6	1831.2	3.1	16.4	9.4		L
	1415	SGMR	8	S	1830.5	1831.1	1.5	40.0			QL=6 ST=2 TYP=3
	1415	PALE	8	S	1830.6	1831.1	1.0	31.0			QL=6 ST=2 TYP=3
	610	SGMR	47	GB	1830.8	1831.1	.7	93.0			QL=6 ST=2 TYP=5
	4995	SGMR	8	S	1830.8	1831.3	1.0	19.0			QL=6 ST=2 TYP=3
	610	PALE	47	GB	1831.1	1831.1	.4	130.0			QL=6 ST=2 TYP=5
	4995	PALE	8	S	1831.1	1831.3	.4	13.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1831.1	1831.3	.5	27.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1831.3	1831.8	.7	16.0			QL=6 ST=2 TYP=3
	9400	HUAN	29	PBI	1832.7	1832.7	25.9	6.0	5.7		0
	2800	OTTA	24P	R	1840.0		230.0	6.0			
	2000	TYKW	20	GRF	2130.0	2210.0	90.0	2.0	1.0		
	3750	TYKW	20	GRF	2150.0	2215.0	90.0	3.0	1.5		
	2695	PENT	26	FAL	2230.0	2340.0	70.0	-6.0	-3.0		
	2930	VORO	45	C	2250.0	2257.0	15.0	65.0			
03	410	LEAR	43	NS	0132.9	0139.3	19.2	10.0			QL=6 ST=2 TYP=1
	100	GORK	44	NS	0254.0E		486.0D		10.0		
	260	ONDR	44	NS	0545.0E		505.0D	20.0			
	204	IZMI	43	NS	0600.0		360.0	15.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
03	200	HIRA	44	NS	1941.0E	2351.0	820.0D	35.0	10.0		ML
	208	VORO	44	NS	2300.0E		120.0D		8.0		
	2695	PENT	240	R	0007.0	0010.0	3.0	2.8	1.4		
	3750	TYKW	5	S	0007.0	0013.2	10.0	7.0	3.0		
	9400	TYKW	21	GRF	0011.0	0019.0	100.0	6.0	3.0		
	3750	TYKW	30	PBI	0017.0		70.0	4.0	2.0		
	3750	TYKW	45	C	0054.0	0103.0	15.0	3.0	1.5		
	3750	TYKW	5	S	0113.0	0113.7	2.0	7.0	3.0		
	2695	PENT	1	S	0113.5	0113.9	1.0	1.6	0.8		
	3750	TYKW	29	PBI	0115.0		10.0	1.5	0.7		
	500	HIRA	42	SER	0131.7	0134.3	9.0	25.0			O
	2000	TYKW	21	GRF	0142.0	0149.0	100.0	3.0	1.5		
	3750	TYKW	20	GRF	0142.0	0153.0	100.0	3.0	1.5		
	1000	TYKW	20	GRF	0142.0	0210.0	120.0	1.0	0.5		
	9400	TYKW	20	GRF	0144.0	0150.0	40.0	3.0	1.5		
	2000	TYKW	5	S	0205.0	0207.0	10.0	1.5	0.5		
	9400	TYKW	5	S	0432.0	0432.2	1.0	4.0	1.5		
	200	HIRA	8	S	0520.0	0520.3	.6	95.0			ML
	3750	TYKW	20	GRF	0700.0	0725.0	70.0	3.0	1.5		
	430	KRAK	8	S	0711.0	0711.7	1.0	180.0			
	810	KRAK	8	S	0711.5	0711.5	.3	5.0			
	2950	GORK	20	GRF	0716.0	0721.0	286.0	3.0	2.0		
	410	LEAR	8	S	0808.5	0808.6	.3	30.0			QL=6 ST=2 TYP=3
	2950	GORK	1	S	0812.5	0813.5	2.8	2.3			
	2950	GORK	20	GRF	0942.0	1001.0	42.0	4.6	2.0		
	2800	OTTA	20	GRF	1000.0	1200.0	120.0D	4.2	2.0		
	2950	GORK	20	GRF	1108.5	1116.0	22.5	3.8	2.0		
	810	KRAK	8	S	1114.7	1114.7	.2	12.0			
	930	BORD	8	S	1115.3	1115.3	.1	32.0	1.0		
	2800	OTTA	260	FAL	1140.0	1205.0	25.0	-3.0	-1.5		
	2800	OTTA	20	GRF	1220.0	1235.0	130.0	3.0	1.5		
	930	BORD	8	S	1233.7	1233.7	.1	15.0	1.0		
	2800	OTTA	26A	FAL	1520.0	1650.0	90.0	-3.0	-1.5		
	2800	OTTA	20	GRF	1600.0	1615.0	40.0	2.2	1.1		
	2800	OTTA	21	GRF	2040.0	2145.0	220.0	7.2	2.4		
	9400	HUAN	2	S/F	2043.4	2045.3	6.2	11.0	6.3		R
	2000	TYKW	28	PRE	2130.0	2133.0	7.0	2.0	1.0		
	1000	TYKW	28	PRE	2130.0	2138.0	8.0	1.5	0.7		
	3750	TYKW	28	PRE	2130.0	2138.0	8.0	4.0	1.5		
	2000	TYKW	45	C	2137.0	2139.6	9.0	27.0	10.0		
	9400	TYKW	45	C	2138.0	2139.0	3.0	8.0	4.0		
	2800	OTTA	3	S	2138.0	2139.5	8.0	22.4	7.4		
	3750	TYKW	45	C	2138.0	2139.6	5.0	19.0	12.0		
	1000	TYKW	45	C	2138.0	2140.5	4.0	5.0	3.0		
	2695	SGMR	4	S/F	2138.5	2139.1	2.5	28.0			QL=6 ST=2 TYP=3
	1415	SGMR	4	S/F	2138.6	2140.1	2.5	26.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	2138.8	2139.5	.8	13.0			QL=6 ST=2 TYP=3
	9400	TYKW	29	PBI	2141.0		55.0	4.0	2.0		
	1000	TYKW	29	PBI	2142.0		80.0	1.5	0.7		
	3750	TYKW	29	PBI	2143.0		50.0	6.0	3.0		
	2000	TYKW	29	PBI	2146.0		80.0	4.0	1.5		
	15400	LEAR	8	S	2347.0	2347.1	.3	16.0			QL=6 ST=2 TYP=3
04	100	GORK	44	NS	0300.0E		540.0D		10.0		
	260	ONDR	44	NS	0557.0E		491.0D	22.0			
	100	HIRA	44	NS	1940.0E	2021.0	420.0D	130.0	30.0		
	200	HIRA	44	NS	1940.0E	2047.0	500.0D	15.0	5.0		ML
	208	VORO	44	NS	2100.0E		240.0D		4.0		
	610	LEAR	8	S	0046.6	0046.8	.2	45.0			QL=6 ST=2 TYP=3
	2000	TYKW	20	GRF	0313.0	0320.0	30.0	1.5	0.7		
	3750	TYKW	20	GRF	0315.0	0326.0	30.0	2.0	1.0		
	3750	TYKW	20	GRF	0352.0	0401.0	30.0	2.0	1.0		
	2000	TYKW	20	GRF	0352.0	0401.0	30.0	1.5	0.7		
	410	LEAR	8	S	0408.8	0409.8	1.5	20.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0441.1	0444.3	3.2U	9.0	4.0		
	9400	TYKW	5	S	0443.5	0444.3	1.5	11.0	2.5		
	8800	LEAR	8	S	0444.1	0444.1	.2	13.0			QL=6 ST=2 TYP=3
	6100	KISV	1	S	0444.1	0444.2	.5	3.0			
	9400	TYKW	29	PBI	0445.0		20.0	2.0	1.0		
	2950	GORK	20	GRF	0514.6	0545.0	78.0	5.2			
	2000	TYKW	20	GRF	0516.0	0600.0	130.0	3.0	1.5		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
04	9400	TYKW	21	GRF	0520.0	0550.0	110.0	6.0	3.0		
	3750	TYKW	20	GRF	0520.0	0550.0	120.0	4.0	2.0		
	1000	TYKW	20	GRF	0520.0	0555.0	120.0	1.5	0.7		
	6100	KISV	1	S	0543.7	0544.3	2.0	4.0			
	9400	TYKW	5	S	0544.0	0544.2	1.0	11.0	2.5		
	9100	GORK	1	S	0544.1	0544.3	.5	13.0	6.0		
	410	LEAR	8	S	0557.6	0558.3	1.2	20.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0558.1	0558.3	.5	8.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0738.6	0738.8	.5	34.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0845.8	0846.0	.3	13.0			QL=6 ST=2 TYP=3
	100	GORK	8	S	1039.8	1040.2	.7	180.0D			
	3000	PDTS	20	GRF	1112.0	1121.7	23.0	9.0			
	2800	OTTA	1	S	1119.0	1120.0	10.0	3.0	1.2		
	1470	PDTS	20	GRF	1119.0	1122.0	56.0	4.0			
	536	ONDR	1	S	1140.5	1140.8	.5	12.0			
	930	BORD	8	S	1223.5	1223.5	.1	17.0	1.0		
	430	KRAK	42	SER	1258.5	1259.5	2.0D	270.0			
	2800	OTTA	22	GRF	1824.0	1840.0	40.0	3.0	1.3		
05	100	GORK	44	NS	0406.0E		414.0D		10.0		
	127	TORN	44	NS	0740.0E		350.0D		4.0		V=1
	245	SGMR	43	NS	1920.0	1938.8	22.3	43.0			QL=6 ST=3 TYP=1
	200	HIRA	44	NS	1939.0E	2016.0	130.0D	80.0	15.0		0
	208	VORO	44	NS	2100.0E		50.0D				
	3750	TYKW	28	PRE	0003.0E	0003.7	14.0D	6.0	4.0D		
	9400	TYKW	21	GRF	0003.0	0035.0	120.0	8.0	4.0D		
	9400	TYKW	5	S	0003.3	0003.7	.7D	5.0	2.0D		
	4995	LEAR	8	S	0003.6	0003.6	.2	10.0			QL=6 ST=2 TYP=3
	2695	PENT	20	GRF	0005.0	0020.0	75.0	7.2	3.2		
	2000	TYKW	28	PRE	0009.0E	0019.0	10.0D	2.0	1.0D		
	3750	TYKW	5	S	0017.0	0019.7	5.0	12.0	7.0		
	2695	LEAR	4	S/F	0017.1	0019.1	3.9	23.0			QL=6 ST=2 TYP=3
	9400	TYKW	45	C	0018.0	0019.4	3.0	6.0	3.0		
	2000	TYKW	45	C	0019.0	0023.6	13.0	7.0	3.5		
	4995	LEAR	8	S	0019.6	0019.8	.4	13.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	0020.0	0020.1	1.0	2.0	0.7		
	9400	TYKW	29	PBI	0021.0		8.0	3.0	1.5		
	3750	TYKW	29	PBI	0022.0		45.0	7.0	4.0		
	500	HIRA	7	C	0023.1	0023.1	2.0	60.0	15.0		0
	245	LEAR	49	GB	0023.3	0023.3	2.0	570.0			QL=6 ST=2 TYP=6
	610	LEAR	8	S	0023.3	0023.3	2.0	42.0			QL=6 ST=2 TYP=3
	410	LEAR	49	GB	0023.3	0023.3	2.0	570.0			QL=6 ST=3 TYP=6
	410	PALE	49	GB	0023.3	0023.5	.8	560.0			QL=6 ST=2 TYP=6
	610	PALE	8	S	0023.3	0023.5	.5	47.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	0023.3	0023.7	4.7	3.0	1.5		
	1000	TYKW	30	PBI	0028.0		75.0	1.0	0.5		
	2000	TYKW	29	PBI	0032.0		70.0	3.0	1.5		
	610	LEAR	47	GB	0033.1	0033.3	1.0	210.0			QL=6 ST=2 TYP=5
	410	LEAR	8	S	0049.8	0050.1	.8	22.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0049.8	0050.1	.7	19.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	0050.0	0050.3	1.0	3.0	1.0		
	3750	TYKW	20	GRF	0325.0	0333.0	30.0	5.0	2.0		
	410	LEAR	4	S/F	0330.8	0332.8	2.3	17.0			QL=6 ST=2 TYP=3
	500	HIRA	8	S	0417.0	0417.1	.4	35.0			0
	17000	NOBE	20	GRF	0423.0	0425.2	16.0	14.0			0
	3750	TYKW	20	GRF	0445.0	0505.0	60.0	2.0	1.0		
	500	HIRA	8	S	0448.9	0449.0	.4	40.0			0
	410	LEAR	8	S	0449.1	0449.3	.7	23.0			QL=6 ST=2 TYP=3
	410	LEAR	4	S/F	0514.0	0515.1	10.5	20.0			QL=6 ST=2 TYP=3
	950	GORK	21	GRF	0514.5	0517.0	7.0	2.0			
	500	HIRA	7	C	0515.1	0515.5	3.0	250.0	50.0		0
	610	LEAR	4	S/F	0515.5	0515.8	6.1	37.0			QL=6 ST=2 TYP=3
	2000	TYKW	45	C	0515.6	0516.1	2.0	7.0	2.0		
	1000	TYKW	45	C	0515.6	0516.1	2.0	20.0	4.0		
	950	GORK	4	S/F	0515.8	0516.0	.7	20.0			
	1415	ATHN	4	S/F	0542.5	0552.6	21.1	16.0			QL=5 ST=2 TYP=3
	2695	ATHN	4	S/F	0546.6	0551.8	17.0	13.0			QL=5 ST=2 TYP=3
	8800	ATHN	4	S/F	0546.8	0552.6	14.2	22.0			QL=5 ST=2 TYP=3
	4995	ATHN	4	S/F	0548.3	0552.6	10.3	9.0			QL=5 ST=2 TYP=3
	410	LEAR	4	S/F	0706.5	0709.3	7.5	10.0			QL=6 ST=2 TYP=3
	430	KRAK	42	SER	0709.0	0709.5	4.5	12.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
05	410	LEAR	8	S	0804.6	0805.0	.9	18.0			QL=6 ST=2 TYP=3
	430	KRAK	42	SER	0805.0	0805.0	8.0	32.0			
	410	LEAR	4	S/F	0809.0	0810.5	4.1	11.0			QL=6 ST=2 TYP=3
	430	KRAK	45	C	0815.5	0818.0	3.5	47.0	12.0		
	410	LEAR	8	S	0817.8	0818.0	1.0	37.0			QL=6 ST=2 TYP=3
	430	KRAK	42	SER	0851.5	0915.5	249.0	115.0			
	430	KRAK			0851.5	1035.5		320.0			
	430	KRAK			0851.5	1051.5		33.0			
	2695	LEAR	4	S/F	0914.0	0915.1	4.8	29.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0914.1	0915.8	3.7	25.0			QL=6 ST=2 TYP=3
	1415	LEAR	4	S/F	0914.1	0915.8	4.2	22.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	0914.3	0915.3	2.2	38.0			QL=5 ST=2 TYP=3
	1415	ATHN	4	S/F	0914.3	0915.8	2.2	33.0			QL=5 ST=2 TYP=3
	4995	ATHN	4	S/F	0914.3	0915.8	2.2	30.0			QL=5 ST=2 TYP=3
	5200	BERN	45	C	0914.5	0915.8	8.0	55.0			
	3100	BERN	45	C	0914.5	0915.8	10.0	41.0			
	8400	BERN	45	C	0914.5	0915.8	6.0	29.0			
	8800	ATHN	8	S	0914.6	0915.8	1.9	13.0			QL=5 ST=2 TYP=3
	6100	KISV	45	C	0914.7	0915.8	2.0	17.0			
	2650	DWIN	2	S/F	0915.0	0915.0	1.0	40.0	20.0		
	930	BORD	45	C	0915.0	0915.8	1.2	21.0	3.0		
	1470	POTS	29	PBI	0915.0	0915.2	8.5	9.0			
	2950	GORK	45	C	0915.0	0915.3	1.2	24.0			
	3000	POTS	29	PBI	0915.0	0915.4	8.0	25.0			
	808	ONDR	2	S/F	0915.0	0915.5	2.0	20.0	9.0		
	610	LEAR	4	S/F	0915.0	0915.6	2.5	38.0			QL=6 ST=2 TYP=3
	1470	POTS			0915.0	0915.7		16.0			
	810	KRAK	2	S/F	0915.0	0915.7	1.2	22.0	5.0		
	650	GORK	4	S/F	0915.0	0915.8	1.2	16.0			
	950	GORK	3	S	0915.0	0915.8	1.2	11.0			
	3000	POTS			0915.0	0915.9		25.0			
	536	ONDR	46	C	0915.0	0916.0	2.0	49.0			
	2950	GORK			0915.0	0918.8		21.0			
	410	LEAR	8	S	0915.1	0915.3	1.0	45.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0915.2	0915.7	1.0	16.0	8.0		
	9500	POTS	3	S	0915.2	0915.9	1.3	14.0			
	2950	GORK	29	PBI	0916.2	0916.2	9.5	6.1			
	950	GORK	29	PBI	0916.2	0916.2	9.2	2.0			
	3100	CRIM	45	C	1015.0	1015.2	2.0	21.0	7.0		
	3100	CRIM			1015.0	1015.8		21.0			
	3100	CRIM	29	PBI	1017.0	1017.0	8.0	4.0	1.0		
	810	KRAK	2	S/F	1035.7	1036.0	.7	9.0	1.0		
	1470	POTS	3	S	1035.9	1036.0	2.1	6.0			
	536	ONDR	46	C	1036.0	1036.0	2.0	52.0			
	2800	OTTA	20	GRF	1135.0	1205.0	100.0	3.0	2.1		
	810	KRAK	8	S	1153.3	1153.3	.1	8.0			
	810	KRAK	41	F	1201.0	1201.5	2.0	6.0	1.0		
	430	KRAK	46	C	1201.0	1202.0	9.0	115.0	7.0		
	430	KRAK			1201.0	1205.2		250.0			
	410	SGMR	47	GB	1201.3	1201.8	1.2	66.0			QL=6 ST=2 TYP=5
	610	SGMR	8	S	1201.5	1201.6	.3	24.0			QL=6 ST=2 TYP=3
	245	SGMR	47	GB	1202.1	1202.1	.5	100.0			QL=6 ST=2 TYP=5
	536	ONDR	46	C	1203.5	1204.0	2.0	36.0			
	410	SGMR	47	GB	1204.8	1205.1	2.2	100.0			QL=6 ST=2 TYP=5
	930	BORD	46	C	1204.8	1205.1	2.2	34.0	4.0		
	610	SGMR	47	GB	1205.0	1205.1	.8	64.0			QL=6 ST=2 TYP=5
	245	SGMR	8	S	1205.0	1205.1	.8	39.0			QL=6 ST=3 TYP=3
	810	KRAK	2	S/F	1205.0	1205.5	1.3	25.0	9.0		
	1470	POTS	4	S/F	1205.0	1206.0	2.0	9.0			
	1415	SGMR	8	S	1205.1	1205.5	.9	20.0			QL=6 ST=2 TYP=3
	1415	ATHN	4	S/F	1205.1	1205.8	2.5	10.0			QL=6 ST=2 TYP=3
	536	ONDR	46	C	1224.0	1224.0	1.0	55.0			
	430	KRAK	42	SER	1224.3	1224.5	2.0	115.0			
	430	KRAK	8	S	1245.0	1245.0	.1	29.0			
	2800	OTTA	1	S	1328.0	1359.5	31.50	8.6	4.2		
	6100	KISV	2	S/F	1357.5	1359.6	4.0	7.0			
	4995	ATHN	4	S/F	1357.8	1359.5	3.3	20.0			QL=5 ST=2 TYP=3
	4995	SGMR	20	GRF	1358.1	1359.5	2.5	30.0			QL=6 ST=2 TYP=2
	2695	SGMR	20	GRF	1358.8	1359.3	1.3	20.0			QL=6 ST=2 TYP=2
	2695	ATHN	8	S	1359.0	1359.3	1.3	8.0			QL=5 ST=2 TYP=3
	2800	OTTA	29	PBI	1400.2	1400.2	12.0	4.4			

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
05	410	SGMR	8 S	1401.1	1401.1	.4	23.0			QL=6 ST=2 TYP=3
	245	SGMR	8 S	1416.8	1417.1	.5	49.0			QL=6 ST=2 TYP=3
	410	SGMR	8 S	1417.3	1417.6	.5	29.0			QL=6 ST=2 TYP=3
	2800	OTTA	20 GRF	1420.0	1430.0	30.0	3.0	1.8		
	610	SGMR	47 GB	1426.6	1426.6	.4	57.0			QL=6 ST=2 TYP=5
	410	SGMR	47 GB	1427.1	1427.3	.4	54.0			QL=6 ST=2 TYP=5
	245	SGMR	47 GB	1427.5	1427.6	.1D	28.0			QL=6 ST=2 TYP=5
	2800	OTTA	240 R	1740.0	1800.0	20.0	2.0	1.0		
	2800	OTTA	240AR	1850.0	1925.0	35.0	3.0			
	2800	OTTA	21 GRF	1900.0	1912.0	25.0	5.0	3.0		
	2800	OTTA	1 S	1900.5	1901.0	1.0	3.0	1.3		
	245	SGMR	8 S	1925.8	1926.1	.7	30.0			QL=6 ST=2 TYP=3
	4995	SGMR	4 S/F	1932.0	1934.0	2.1	13.0			QL=6 ST=2 TYP=3
	2695	SGMR	8 S	2010.3	2010.8	1.5	18.0			QL=6 ST=2 TYP=3
	245	PALE	8 S	2039.3	2040.1	1.3	44.0			QL=5 ST=2 TYP=3
	2800	OTTA	240 R	2110.0	2140.0	30.0	2.2	1.0		
	3750	TYKW	21 GRF	2325.0	0051.0	230.0	4.0	2.0		
	2695	PENT	20 GRF	2330.0	2355.0	50.0	2.2	1.1		
	2000	TYKW	20 GRF	2335.0	2358.0	50.0	2.0	1.0		
06	2000	TYKW	20 GRF	0032.0	0100.0	160.0	3.0	1.5		
	2695	PENT	20 GRF	0040.0	0100.0	60.0	2.2	1.4		
	610	LEAR	47 GB	0129.1	0129.5	1.0	68.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	0129.1	0129.5	1.4	22.0			QL=6 ST=2 TYP=3
	610	PALE	47 GB	0129.5	0129.6	.3	72.0			QL=6 ST=2 TYP=5
	410	PALE	8 S	0129.5	0129.6	.3	25.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0142.1	0142.5	1.5	20.0			QL=6 ST=2 TYP=3
	3750	TYKW	20 GRF	0155.0	0159.0	60.0	2.0	1.0		
	245	LEAR	8 S	0254.6	0254.8	.4	17.0			QL=6 ST=2 TYP=3
	410	LEAR	47 GB	0309.1	0309.1	.5	52.0			QL=6 ST=2 TYP=5
	245	LEAR	8 S	0319.8	0320.0	.3	11.0			QL=6 ST=2 TYP=3
	410	LEAR	4 S/F	0401.3	0403.8	3.0	32.0			QL=6 ST=3 TYP=3
	500	HIRA	7 C	0402.7	0403.3	1.4	40.0	25.0		ML
	1000	TYKW	45 C	0403.0	0404.2	2.0	4.0	1.0		
	2000	TYKW	45 C	0403.0	0404.2	2.0	4.0	1.0		
	2000	TYKW	5 S	0414.9	0415.0	1.0	3.0	0.7		
	410	LEAR	8 S	0452.6	0453.0	1.2	20.0			QL=6 ST=2 TYP=3
	1000	TYKW	45 C	0457.0	0502.9	13.0	8.0	3.0		
	245	LEAR	8 S	0514.6	0514.8	.2	21.0			QL=6 ST=2 TYP=3
	650	GORK	1 S	0523.6	0524.5	1.3	5.0	2.0		
	950	GORK	1 S	0524.2	0524.6	.7	2.5			
	410	LEAR	8 S	0543.3	0543.3	.3	11.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0544.1	0544.6	1.5	32.0			QL=6 ST=2 TYP=3
	500	HIRA	3 S	0544.3	0544.4	1.3	18.0	9.0		0
	1000	TYKW	5 S	0607.0	0607.3	1.0	4.0	1.0		
	15400	LEAR	4 S/F	0650.8	0651.1	2.3	10.0			QL=5 ST=2 TYP=3
	930	BORD	41 F	0707.6	0708.0	.4	12.0	2.0		
	430	KRAK	8 S	0725.2	0725.2	.2	41.0			
	410	LEAR	8 S	0725.3	0725.3	.2	16.0			QL=6 ST=2 TYP=3
	610	LEAR	4 S/F	0731.8	0733.0	3.7	19.0			QL=6 ST=2 TYP=3
	1415	LEAR	4 S/F	0732.3	0733.3	3.8	11.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0732.3	0733.3	1.3	13.0			QL=6 ST=2 TYP=3
	810	KRAK	41 F	0732.5	0733.2	2.2	11.0	2.0		
	810	KRAK		0732.5	0734.3		17.0			
	500	HIRA	7 C	0732.6	0732.6	1.0	13.0	8.0		0
	8800	LEAR	8 S	0732.6	0733.3	1.2	10.0			QL=6 ST=2 TYP=3
	15400	LEAR	8 S	0732.6	0733.3	1.4	23.0			QL=6 ST=2 TYP=3
	950	GORK	4 S/F	0732.7	0733.0	2.2	14.5			
	430	KRAK	2 S/F	0732.7	0733.2	.7	30.0	4.0		
	1000	TYKW	45 C	0732.7	0733.4	3.5	9.0	3.0		
	6100	KISV	1 S	0732.8	0733.5	2.0	3.0			
	950	GORK	3 S	0732.8	0733.5	4.0	15.0	7.0		
	9100	GORK	1 S	0732.9	0733.3	1.0	15.0	7.0		
	3750	TYKW	5 S	0733.0	0733.3	2.0	2.0	0.5		
	9400	TYKW	5 S	0733.0	0733.3	0.7	12.0	3.0		
	2000	TYKW	5 S	0733.0	0733.4	2.0	4.0	1.0		
	2950	GORK	1 S	0733.0	0733.5	1.4	3.8	2.0		
	9500	POTS	3 S	0733.0	0733.5	1.0	12.0			
	1470	POTS	3 S	0733.0	0733.5	2.0	7.0			
	2695	LEAR	8 S	0733.1	0733.3	1.5	2.0			QL=6 ST=2 TYP=3
	930	BORD	4 S/F	0733.2	0734.7	2.0	16.0	3.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
06	430	KRAK	8	S	0852.0	0852.0	.1	9.0			
	430	KRAK	8	S	0901.8	0901.8	.1	16.0			
	430	KRAK	8	S	0954.0	0954.5	.5	18.0			
	430	KRAK	42	SER	1025.0	1031.3	12.0	93.0			
	810	KRAK	8	S	1030.8	1030.8	.2	13.0			
	536	ONDR	8	S	1031.0	1031.0	1.0	42.0			
	260	ONDR	8	S	1031.0	1031.0	.1	26.0			
	3100	CRIM	26	FAL	1058.0	1110.0		4.0			
	260	ONDR	41	F	1125.0	1154.5	32.0	209.0U			
	2800	OTTA	22	GRF	1240.0	1530.0	390.0	8.0	4.0		
	9400	HUAN	22	GRF	1525.8	1543.1	33.2	6.9	2.8		0
	100	HIRA	46	C	2039.6	2040.0	.7	145.0	8.4		
	410	PALE	8	S	2113.3	2113.5	.3	29.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	2234.0	2234.7	1.5	1.5	0.5		
	2000	TYKW	5	S	2257.0	2259.0	25.0	2.0	1.0		
	3750	TYKW	20	GRF	2300.0	2309.0	35.0	2.0	1.0		
	610	LEAR	4	S/F	2336.5	2338.1	4.6	35.0			QL=6 ST=2 TYP=3
	3750	TYKW	20	GRF	2340.0	2345.0	50.0	2.0	1.0		
	245	LEAR	8	S	2349.5	2349.6	.3	49.0			QL=6 ST=2 TYP=3
07	245	LEAR	43	NS	0526.1	0734.6	252.9D	20.0			QL=6 ST=2 TYP=1
	208	VORO	43	NS	2205.0		175.0D		4.0		
	245	PALE	43	NS	2237.1	0007.1	358.9D	310.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	2302.0	2354.8	636.0D	219.0			QL=6 ST=2 TYP=1
	200	HIRA	43	NS	2324.0	0030.0	200.0	30.0	10.0		0
	3750	TYKW	28	PRE	0055.0	0130.0	35.0	3.0	1.5		
	3750	TYKW	5	S	0102.2	0102.4	1.5	2.0	0.7		
	9400	TYKW	5	S	0122.0	0122.6	3.0	4.0	1.0		
	9395	PEKG	1	S	0122.0	0122.6	4.0	6.7	3.0		
	3750	TYKW	45	C	0130.0	0133.7	15.0	31.0	10.0		
	2695	PENT	21	GRF	0130.0	0137.0	14.0	7.2	4.0		
	410	LEAR	4	S/F	0130.8	0132.1	5.0	24.0			QL=6 ST=2 TYP=3
	245	LEAR	4	S/F	0130.8	0132.1	5.0	24.0			QL=6 ST=3 TYP=3
	610	LEAR	4	S/F	0132.1	0133.3	4.9	8.0			QL=6 ST=2 TYP=3
	410	PALE	47	GB	0132.3	0133.1	2.5	330.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	0132.3	0133.8	2.5	280.0			QL=6 ST=3 TYP=5
	1000	TYKW	5	S	0132.5	0133.0	1.0	3.0	0.7		
	9400	TYKW	45	C	0132.5	0134.5	3.5	10.0	3.0		
	4995	PALE	4	S/F	0132.6	0133.1	2.2	21.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0132.6	0133.3	2.2	19.0			QL=6 ST=2 TYP=3
	9395	PEKG	45	C	0133.0	0134.5	3.0	9.6	3.2		
	1000	TYKW	5	S	0134.0	0134.4	1.2	1.5	0.5		
	2695	PENT	40	F	0134.0	0134.5	2.0	42.0			
	2000	TYKW	45	C	0134.0	0134.7	3.0	31.0	3.0		
	2695	LEAR	8	S	0134.6	0134.6	.2	32.0			QL=6 ST=2 TYP=3
	9400	TYKW	29	PBI	0136.0		35.0	3.0	1.5		
	9395	PEKG	29	PBI	0136.0	0137.6	8.0	4.8	2.0		
	2000	TYKW	29	PBI	0137.0		10.0	1.5	0.7		
	3750	TYKW	30	PBI	0145.0		65.0	6.0	3.0		
	3750	TYKW	5	S	0151.0	0153.5	10.0	4.0	1.5		
	2000	TYKW	20	GRF	0153.0	0159.0	35.0	2.0	1.0		
	245	LEAR	8	S	0256.6	0256.8	.2	19.0			QL=6 ST=2 TYP=3
	2000	TYKW	20	GRF	0317.0	0400.0	110.0	2.0	1.0		
	3750	TYKW	21	GRF	0330.0	0400.0	110.0	2.0	1.0		
	610	LEAR	4	S/F	0331.8	0333.0	3.0	15.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0422.0	0422.4	3.0	1.0	0.3		
	6100	KISV	2	S/F	0438.2	0440.0	4.5	3.0			
	3750	TYKW	5	S	0439.0	0439.7	2.0	5.0	2.0		
	2950	GORK	1	S	0439.3	0439.9	1.1	3.0	1.0		
	3750	TYKW	29	PBI	0441.0		15.0	1.5	0.7		
	3750	TYKW	5	S	0533.0	0534.3	4.0	1.5	0.5		
	3750	TYKW	21	GRF	0545.0	0635.0	180.0	3.0	1.5		
	2000	TYKW	20	GRF	0615.0	0659.0	50.0	2.0	1.0		
	6100	KISV	1	S	0618.8	0619.6	1.5	5.0			
	3750	TYKW	5	S	0619.0	0619.6	4.0	5.0	1.5		
	6100	KISV	28	PRE	0720.5	0721.5	23.0	3.0			
	2000	TYKW	20	GRF	0724.0	0740.0	70.0	2.0	1.0		
	3750	TYKW	21	GRF	0730.0	0735.0	60.0	2.0	1.0		
	9400	TYKW	45	C	0741.0	0743.7	8.0	34.0	10.0		
	9500	POTS	40	F	0741.0	0743.8	12.0	25.0			
	9395	PEKG	45	C	0741.7	0743.7	10.3	31.2	8.5		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
07	9100	GORK			0741.9						
	9100	GORK	46	C	0741.9	0743.6	12.2	30.0			
	9100	GORK			0741.9	0744.4		25.0			
	8800	LEAR	4	S/F	0743.3	0744.3	4.8	18.0			QL=6 ST=3 TYP=3
	8400	BERN	45	C	0743.4	0744.4	7.0	40.0			
	11800	BERN	45	C	0743.4	0745.6	7.0	61.0			
	19600	BERN	45	C	0743.4	0745.6	7.0	63.0			
	15400	LEAR	47	GB	0743.5	0743.6	4.3	51.0			QL=6 ST=3 TYP=5
	8800	ATHN	4	S/F	0743.6	0744.3	3.7	18.0			QL=6 ST=2 TYP=3
	6100	KISV	46	C	0743.6	0744.5	6.5U	11.0			
	6100	KISV			0743.6	0745.8		9.0			
	3750	TYKW	5	S	0744.0	0746.5	8.0	2.0	1.0		
	9400	TYKW	29	PBI	0749.0		15.0	5.0	2.0		
	6100	KISV	29	PBI	0750.0	0750.0	17.0	4.0			
	6100	KISV	2	S/F	0755.3	0756.3	2.0	3.0			
	3750	TYKW	45	C	0756.0	0800.3	10.0	4.0	1.0		
	9100	GORK	1	S	0901.5	0902.4	1.4	8.0	4.0		
	260	ONDR	41	F	0940.0	1028.5	50.0	21.0			
	430	KRAK	8	S	1019.0	1019.2	.5	12.0			
	430	KRAK	4	S/F	1026.3	1028.0	2.0	77.0	5.0		
	6100	KISV	1	S	1033.2	1033.4	.5	3.0			
	2695	SGMR	8	S	1036.6	1038.1	1.7	20.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	1037.0	1037.6	2.5	13.0			QL=6 ST=2 TYP=3
	1415	ATHN	4	S/F	1037.0	1037.6	2.5	19.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	1037.0	1037.6	2.5	13.0			QL=6 ST=2 TYP=3
	6100	KISV	1	S	1037.4	1038.0	3.0	6.0			
	1415	SGMR	8	S	1037.8	1038.1	.8	23.0			QL=6 ST=2 TYP=3
	2650	DWIN	1	S	1038.0	1038.0	1.0	20.0	10.0		
	2695	ATHN	4	S/F	1043.1	1044.3	3.9	15.0			QL=6 ST=3 TYP=3
	4995	ATHN	4	S/F	1043.1	1044.3	3.9	8.0			QL=6 ST=3 TYP=3
	1415	ATHN	4	S/F	1043.1	1044.3	3.9	23.0			QL=6 ST=3 TYP=3
	6100	KISV	1	S	1043.7	1044.5	4.0	4.0			
	2650	DWIN	1	S	1044.0	1044.0	1.0	20.0	10.0		
	1415	SGMR	4	S/F	1044.0	1044.3	8.6	34.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1044.0	1044.5	.8	19.0			QL=6 ST=2 TYP=3
	15400	SGMR	4	S/F	1045.0	1045.1	12.3	27.0			QL=6 ST=2 TYP=3
	9500	POTS	40	F	1133.0	1134.8	5.0	16.0			
	6100	KISV	1	S	1134.3	1134.9	3.0	3.0			
	2800	OTTA	21	GRF	1155.0	1207.0	30.0	3.0	1.6		
	2800	OTTA	1	S	1200.3	1201.0	1.5	3.4	1.5		
	6100	KISV	1	S	1200.4	1201.0	2.0	4.0			
	4995	SGMR	8	S	1200.8	1201.0	.3	13.0			QL=6 ST=2 TYP=3
	260	ONDR	41	F	1217.0	1230.0	33.0	7.0			
	2800	OTTA	20	GRF	1305.0	1315.0	50.0	2.4	1.2		
	2695	SGMR	20	GRF	1311.1	1315.8	19.0	20.0			QL=6 ST=2 TYP=2
	8800	ATHN	8	S	1401.6	1402.8	2.0	15.0			QL=5 ST=2 TYP=3
	4995	ATHN	8	S	1401.8	1402.3	1.8	11.0			QL=5 ST=2 TYP=3
	9400	HUAN	1	S	1401.8	1402.9	2.6	8.2	3.6		0
	9400	HUAN	29	PBI	1404.4	1404.4	14.4	2.7	1.2		0
	2800	OTTA	260	FAL	1420.0	1445.0	25.0	-3.0	-1.5		
	9400	HUAN	2	S/F	1502.8	1503.3	2.1	3.4	1.8		0
	9400	HUAN	20	GRF	1522.0	1538.2	30.7	9.5	4.2		0
	2800	OTTA	1	S	1537.0	1538.0	2.0	3.8	1.8		
	2695	ATHN	4	S/F	1537.0	1537.3	2.8	5.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	1537.0	1538.3	5.3	8.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1537.6	1538.1	.9	17.0			QL=6 ST=2 TYP=3
	9400	HUAN	23	GRF	1708.0	1721.2	22.0	10.2	5.3		L
	9400	HUAN	4	S/F	1713.7	1714.4	2.2	136.0	53.8		L
	15400	PALE	47	GB	1714.0	1714.5	.8	320.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1714.0	1714.6	.8	239.0			QL=6 ST=2 TYP=5
	8400	BERN	8	S	1714.3	1714.5	.5	155.0			
	11800	BERN	8	S	1714.3	1714.5	.5	296.0			
	19600	BERN	8	S	1714.3	1714.5	.5	78.0			
	8800	PALE	47	GB	1714.5	1714.6	.3	65.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1714.5	1714.6	.3	92.0			QL=6 ST=2 TYP=5
	29	UPIC	45	C	1738.0	1739.4	1.7				
	55	UPIC	46	C	1738.4	1739.1	2.1				
	9400	HUAN	21	GRF	1917.5E	1931.7	68.7D	12.2	4.7		L
	9400	HUAN	8	S	1918.7	1919.3	1.1	83.0	37.9		L
	8800	SGMR	47	GB	1919.1	1919.3	.7	82.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1919.3	1919.3	.3	100.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
07	9400	HUAN	3 S	1925.9	1927.0	3.5	66.6	25.6		L
	2800	OTTA	240AR	1926.0	1929.0	3.0	2.8	1.4		
	2800	OTTA	3 S	1926.2	1927.0	2.0	11.0	4.0		
	4995	SGMR	47 GB	1926.6	1927.1	1.5	59.0			QL=6 ST=2 TYP=5
	2695	SGMR	4 S/F	1926.6	1927.1	2.5	13.0			QL=6 ST=2 TYP=3
	8800	SGMR	47 GB	1926.6	1927.1	1.4	78.0			QL=6 ST=2 TYP=5
	8800	PALE	8 S	1926.8	1927.0	.5	29.0			QL=6 ST=2 TYP=3
	15400	PALE	8 S	1926.8	1927.1	.3	30.0			QL=6 ST=2 TYP=3
	15400	SGMR	8 S	1926.8	1927.1	.8	28.0			QL=6 ST=2 TYP=3
	4995	PALE	8 S	1926.8	1927.1	.8	30.0			QL=6 ST=2 TYP=3
	9400	HUAN	2 S/F	1938.4	1939.0	1.7	8.2	4.6		0
	9400	TYKW	47 GB	2215.0	2218.5	15.0	4100.0	450.0		
	9400	HUAN	47 GB	2215.7	2218.2	8.0	1020.0	742.2		L
	500	HIRA	45 C	2215.7	2218.9	20.0	110.0	40.0		WR
	1000	TYKW	45 C	2216.0	2218.7	14.0	290.0	50.0		
	3750	TYKW	47 GB	2216.0	2219.2	14.0	1000.0	150.0		
	2000	TYKW	45 C	2216.0	2219.3	15.0	470.0	65.0		
	208	VORO	48 C	2216.0	2220.0U	10.0	300.0D			
	17000	NOBE	47 GB	2216.0	2218.6	6.8	8500.0			L
	8800	PALE	49 GB	2216.1	2218.5	13.5	5100.0			QL=6 ST=2 TYP=7
	410	PALE	49 GB	2216.3	2216.5	7.7	180.0			QL=6 ST=2 TYP=7
	410	SGMR	49 GB	2216.3	2217.3	10.3	160.0			QL=6 ST=2 TYP=7
	4995	PALE	49 GB	2216.3	2218.5	9.3	1300.0			QL=6 ST=2 TYP=7
	4995	SGMR	49 GB	2216.3	2218.6	7.5	1600.0			QL=6 ST=2 TYP=7
	8800	SGMR	49 GB	2216.5	2218.5	5.6	3000.0			QL=6 ST=2 TYP=7
	2800	OTTA	47 GB	2216.5	2219.5	8.5	640.0	157.0		
	200	HIRA	48 C	2216.5	2221.0	65.0	2100.0	90.0		0
	200	HIRA		2216.5	2233.1		120.0			0
	245	SGMR	49 GB	2216.6	2217.3	10.2	320.0			QL=6 ST=2 TYP=7
	15400	PALE	49 GB	2216.6	2218.5	12.2	8200.0			QL=6 ST=2 TYP=7
	15400	SGMR	49 GB	2216.6	2218.5	10.0	8000.0			QL=6 ST=2 TYP=7
	2695	SGMR	49 GB	2216.6	2219.3	26.0	610.0			QL=6 ST=2 TYP=7
	245	PALE	49 GB	2216.8	2217.3	7.8	350.0			QL=6 ST=2 TYP=7
	1415	SGMR	49 GB	2216.8	2218.6	12.0	500.0			QL=6 ST=2 TYP=7
	1415	PALE	49 GB	2217.0	2218.5	7.0	320.0			QL=6 ST=2 TYP=7
	610	PALE	49 GB	2217.0	2218.5	9.8	110.0			QL=6 ST=2 TYP=7
	610	SGMR	49 GB	2217.0	2219.3	13.8	260.0			QL=6 ST=2 TYP=7
	35000	NAGO	47 GB	2218.0	2218.0	2.0	5500.0			
	100	HIRA	48 C	2219.0	2225.4	17.0	10000.0D	2300.0D		
	17000	NOBE	29 PBI	2222.8	2222.8	11.0	78.0			0
	2800	OTTA	30 PBI	2225.0	2225.0	20.0	21.0	10.5		
	2800	OTTA	8 S	2227.7	2227.8	.3	6.4	3.2		
	1000	TYKW	30 PBI	2230.0		40.0	7.0	2.0		
	9400	TYKW	29 PBI	2230.0		30.0	23.0	8.0		
	3750	TYKW	29 PBI	2230.0		25.0	13.0	5.0		
	2000	TYKW	30 PBI	2231.0		30.0	13.0	4.0		
	2000	TYKW	45 C	2233.0	2234.6	3.5	18.0	4.0		
	2800	OTTA	1 S	2233.0	2235.0	3.0	4.2	2.8		
	1000	TYKW	45 C	2234.0	2235.5	9.0	8.0	3.0		
	245	PALE	8 S	2237.0	2237.1	.5	41.0			QL=6 ST=2 TYP=3
	1000	TYKW	45 C	2248.0	2249.0	2.0	9.0	3.0		
	610	PALE	8 S	2248.8	2249.0	.7	27.0			QL=6 ST=2 TYP=3
	610	SGMR	8 S	2248.8	2249.0	1.0	38.0			QL=6 ST=2 TYP=3
	2000	TYKW	45 C	2316.0	2318.3	3.0	4.0	1.0		
	2695	PENT	8 S	2333.9	2333.9	.1	6.6			
	245	PALE	8 S	2337.1	2337.3	.4	21.0			QL=6 ST=2 TYP=3
	245	PALE	8 S	2341.5	2341.8	.5	23.0			QL=6 ST=2 TYP=3
	9400	TYKW	20 GRF	2350.0	0010.0	80.0	4.0	2.0		
	3750	TYKW	20 GRF	2350.0	0015.0	70.0	3.0	1.5		
	2000	TYKW	20 GRF	2355.0	0004.0	70.0	3.0	1.0		
08	1000	TYKW	45 C	0043.0	0043.8	1.5	2.0	0.7		
	1000	TYKW	45 C	0045.0	0046.4	2.0	3.0	1.0		
	3750	TYKW	45 C	0108.0	0113.4	15.0	2.0	1.0		
	2000	TYKW	28 PRE	0224.0	0232.6	21.0	4.0	2.0		
	1000	TYKW	28 PRE	0225.0	0232.7	20.0	4.0	2.0		
	3750	TYKW	28 PRE	0225.0	0245.0	20.0	2.0	1.0		
	1415	LEAR	20 GRF	0225.8	0232.6	19.3	8.0			QL=6 ST=2 TYP=2
	3653	YUNN	47 GB	0243.6	0317.0	313.6	3705.0			
	500	HIRA	45 C	0244.7	0316.2	85.0	300.0	50.0		WR
	9400	TYKW	28 PRE	0245.0	0256.0	11.0	14.0	5.0		

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08	2000	TYKW			0245.0	0304.3		840.0			
	3750	TYKW	47	GB	0245.0	0306.4	70.0	8500.0	750.0		
	1000	TYKW			0245.0	0307.6		295.0			
	3750	TYKW			0245.0	0317.2		2660.0			
	2000	TYKW	47	GB	0245.0	0317.9	80.0	1970.0	400.0		
	1000	TYKW	47	GB	0245.0	0318.4	85.0	585.0	145.0		
	1415	PALE	47	GB	0245.3	0254.3	13.3	119.0			QL=6 ST=2 TYP=5
	1415	LEAR	49	GB	0245.3	0304.1	33.3	540.0			QL=6 ST=2 TYP=6
	2695	LEAR	49	GB	0246.1	0304.1	32.5	990.0			QL=6 ST=2 TYP=6
	200	HIRA	46	C	0248.7	0305.4	50.0	210.0	34.0		WR
	200	HIRA			0248.7	0321.0		140.0			MR
	9395	PEKG	47	GB	0249.0	0307.7	48.0	349.0	282.0D		
	9395	PEKG			0249.0	0317.0		1056.0D			
	4995	LEAR	49	GB	0249.1	0305.1	29.5	630.0			QL=6 ST=2 TYP=6
	610	LEAR	47	GB	0249.6	0304.8	29.0	189.0			QL=6 ST=2 TYP=5
	610	PALE	20	GRF	0250.1	0255.8	8.5	32.0			QL=6 ST=2 TYP=2
	4995	PALE	20	GRF	0250.6	0256.3	8.0	46.0			QL=6 ST=2 TYP=2
	100	GORK	46	C	0251.0E	0257.7	96.0D	160.0			
	8800	LEAR	47	GB	0251.8	0305.6	26.8	360.0			QL=6 ST=2 TYP=5
	8800	PALE	8	S	0254.0	0254.3	.5	15.0			QL=6 ST=2 TYP=3
	2950	GORK	47	GB	0254.0	0307.0	45.0	950.0			
	2950	GORK			0254.0	0317.2		2500.0			
	410	LEAR	47	GB	0254.5	0303.6	24.1	90.0			QL=6 ST=2 TYP=5
	9400	TYKW			0256.0	0307.8		470.0			
	9400	TYKW	47	GB	0256.0	0317.0	44.0	1580.0	450.0		
	2840	PEKG	47	GB	0256.0E	0318.0U	37.0D	1353.0D			
	410	PALE	8	S	0256.6	0257.1	2.0	22.0			QL=6 ST=2 TYP=3
	35000	NAGO	20	GRF	0257.0	0317.0	180.0	198.0			
	950	GORK	47	GB	0257.0E	0318.4	69.0D	3050.0			
	15400	LEAR	47	GB	0257.3	0305.6	21.3	139.0			QL=6 ST=2 TYP=5
	410	PALE	49	GB	0258.6	0303.6	20.2	85.0			QL=6 ST=2 TYP=7
	1415	PALE	49	GB	0258.6	0304.1	20.2	620.0			QL=6 ST=2 TYP=7
	610	PALE	49	GB	0258.6	0304.8	20.2	180.0			QL=6 ST=2 TYP=7
	4995	PALE	49	GB	0258.6	0305.6	20.2	630.0			QL=6 ST=2 TYP=7
	8800	PALE	49	GB	0258.6	0305.6	20.2	350.0			QL=6 ST=2 TYP=7
	17000	NOBE	45	C	0258.8	0316.8	32.5	715.0			L
	15400	PALE	49	GB	0259.1	0305.6	19.7	130.0			QL=6 ST=2 TYP=7
	245	PALE	49	GB	0300.1	0304.6	18.7	130.0			QL=6 ST=2 TYP=7
	245	LEAR	47	GB	0304.6	0304.6	14.0	139.0			QL=6 ST=2 TYP=5
	9100	GORK	47	GB	0314.0E	0318.8	22.0D	1490.0			
	650	GORK	47	GB	0316.3E	0317.2	49.7D	510.0			
	100	GORK			0317.0	0317.0U		200.0U			
	2950	GORK	30	PBI	0317.2	0339.0	400.0D	108.0			
	410	LEAR	47	GB	0318.6	0318.8	18.7	160.0			QL=6 ST=2 TYP=5
	8800	LEAR	49	GB	0318.6	0318.8	49.2	1600.0			QL=6 ST=2 TYP=6
	15400	LEAR	49	GB	0318.6	0318.8	49.2	860.0			QL=6 ST=2 TYP=6
	4995	LEAR	49	GB	0318.6	0318.8	44.4	2600.0			QL=6 ST=2 TYP=6
	2695	LEAR	49	GB	0318.6	0318.8	44.4	2699.0			QL=6 ST=3 TYP=6
	1415	LEAR	49	GB	0318.6	0318.8	47.4	1199.0			QL=6 ST=2 TYP=6
	610	LEAR	47	GB	0318.6	0318.8	46.5	470.0			QL=6 ST=2 TYP=5
	245	LEAR	47	GB	0318.6	0320.6	3.9	139.0			QL=6 ST=2 TYP=5
	4995	PALE	49	GB	0318.8	0318.8	26.3	2100.0			QL=6 ST=2 TYP=7
	8800	PALE	49	GB	0318.8	0318.8	26.3	1300.0			QL=6 ST=2 TYP=7
	1415	PALE	49	GB	0318.8	0318.8	26.3	1399.0			QL=6 ST=2 TYP=7
	610	PALE	49	GB	0318.8	0318.8	26.3	480.0			QL=6 ST=2 TYP=7
	410	PALE	49	GB	0318.8	0318.8	7.2	169.0			QL=6 ST=2 TYP=7
	15400	PALE	49	GB	0318.8	0319.0	26.3	710.0			QL=6 ST=2 TYP=7
	17000	NOBE	29	PBI	0331.3	0331.3	180.0	143.0			L
	9100	GORK	29	PBI	0336.0	0336.0	284.0	140.0			
	9395	PEKG	29	PBI	0337.0		98.0D	100.0	35.6		
	9400	TYKW	29	PBI	0340.0		300.0D	155.0	60.0D		
	3750	TYKW	29	PBI	0355.0		320.0D	96.0	45.0D		
	2000	TYKW	30	PBI	0405.0		300.0D	53.0	30.0D		
	650	GORK	29	PBI	0406.0	0406.0	159.6	7.0			
	950	GORK	29	PBI	0406.0	0406.0	378.0	9.0			
	1000	TYKW	30	PBI	0410.0		265.0D	13.0	13.0D		
	1000	TYKW	45	C	0415.0	0431.8	25.0	4.0	1.5		
	2000	TYKW	5	S	0431.0	0432.0	6.0	1.5	0.7		
	1000	TYKW	45	C	0552.0	0553.9	16.0	3.0	1.0		
	650	GORK	1	S	0737.7	0739.0	5.0	2.0			
	650	GORK	20	GRF	0806.2	0812.0	11.8	4.0	2.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
08	930	BORD	41	F	0833.2	0833.2	.2	14.0	2.0		
	6100	KISV	23	GRF	0929.5	0940.7	30.0	5.0			
	33	UPIC	4	S/F	0942.5	0942.7	.6				
	29	UPIC	4	S/F	0942.6	0942.8	.6				
	430	KRAK	8	S	1026.3	1026.5	.3	29.0			
	33	UPIC	2	S/F	1033.1	1033.2	.4				
	29	UPIC	2	S/F	1033.3	1033.4	.4				
	430	KRAK	8	S	1108.5	1109.0	1.0	32.0			
	430	KRAK	8	S	1116.8	1116.9	.2	16.0			
	8800	ATHN	8	S	1143.3	1144.3	1.8	23.0			QL=5 ST=2 TYP=3
	9400	HUAN	2	S/F	1143.5	1144.3	3.0	11.1	7.2		L
	9500	POTS	40	F	1143.5	1144.5	22.0	16.0			
	610	SGMR	49	GB	1143.6	1143.8	2.5	1199.0			QL=6 ST=2 TYP=6
	33	UPIC	45	C	1143.7	1143.8	1.1				
	29	UPIC	45	C	1143.8	1144.1	1.2				
	930	BORD	46	C	1144.0	1145.8	3.0	42.0	2.0		
	6100	KISV	2	S/F	1144.5	1145.1	3.5	5.0			
	9400	HUAN	29	PBI	1146.5	1146.5	9.9	4.8	4.0		L
	6100	KISV	1	S	1149.9	1151.3	4.0	3.0			
	2800	OTTA	20	GRF	1730.0	1835.0	195.0	3.0	1.5		
	9400	TYKW	5	S	2114.0	2114.7	2.0	4.0	1.0		
	2930	VORO	47	GB	2215.0	2220.0	45.0	7427.0			
	2695	PENT	240	R	2220.0	2315.0	55.0	3.6			
	9400	TYKW	5	S	2240.0	2240.3	1.0	3.0	1.0		
	9400	TYKW	5	S	2250.0	2252.1	8.0	6.0	2.0		
	2695	PENT	21	GRF	2345.0	2355.0	65.0	3.6	1.4		
	3750	TYKW	5	S	2350.0	2351.1	2.5	9.0	5.0		
	2695	LEAR	4	S/F	2350.0	2351.1	2.3	8.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	2350.0	2351.3	2.3	11.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	2350.5	2351.0	1.5	3.0	1.0		
	2695	PENT	1	S	2351.0	2351.3	1.5	1.8	0.9		
	3750	TYKW	29	PBI	2352.5		60.0	3.0	1.5		
09	33	UPIC	43	NS	1149.1	1225.3	370.9D				
	29	UPIC	43	NS	1149.3	1225.4	370.7D				
	208	VORO	44	NS	2100.0E		240.0D		2.0		
	3750	TYKW	20	GRF	0125.0	0202.0	100.0	2.0	1.0		
	2000	TYKW	20	GRF	0131.0	0135.0	60.0	1.5	0.7		
	9400	TYKW	20	GRF	0153.0	0200.0	30.0	4.0	2.0		
	9400	TYKW	5	S	0227.5	0229.0	10.0	2.0	1.0		
	245	LEAR	8	S	0232.0	0232.1	.6	9.0			QL=6 ST=2 TYP=3
	9400	TYKW	45	C	0301.5	0302.5	7.0	9.0	3.0D		
	2950	GORK	1	S	0308.0	0308.9	.9U	9.1			
	9400	TYKW	5	S	0323.0	0323.2	1.0	3.0	1.0		
	9400	TYKW	5	S	0344.0	0344.2	3.0	3.0	1.0		
	3750	TYKW	20	GRF	0350.0	0405.0	30.0	2.0	1.0		
	500	HIRA	8	S	0351.0	0351.0	.4	60.0			O
	6100	KISV	46	C	0401.8	0403.1	11.0	6.0			
	6100	KISV			0401.8	0408.1		5.0			
	9400	TYKW	5	S	0402.0	0406.0	12.0	5.0	2.0		
	8800	LEAR	4	S/F	0402.0	0403.0	5.1	5.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0402.0	0404.0	10.1	5.0			QL=6 ST=2 TYP=3
	9400	TYKW	21	GRF	0425.0	0438.0	110.0	10.0	4.0		
	3750	TYKW	21	GRF	0425.0	0451.0	160.0	4.0	2.0		
	8800	LEAR	20	GRF	0431.8	0440.0	32.2	8.0			QL=6 ST=2 TYP=2
	4995	LEAR	20	GRF	0431.8	0440.3	32.2	4.0			QL=6 ST=2 TYP=2
	2950	GORK	20	GRF	0432.2	0748.0	283.0	6.1			
	15400	LEAR	20	GRF	0432.6	0443.0	31.4	8.0			QL=6 ST=2 TYP=2
	9100	GORK	20	GRF	0433.0	0527.7	54.7U	13.0			
	2000	TYKW	20	GRF	0440.0	0500.0	50.0	2.0	1.0		
	6100	KISV	3	S	0524.2	0525.7	5.5	21.0			
	4995	LEAR	4	S/F	0524.8	0525.6	4.2	18.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0525.0	0525.7	2.5	3.0	1.0		
	9400	TYKW	5	S	0525.0	0525.7	2.0	8.0	3.0		
	8800	LEAR	8	S	0525.1	0525.6	1.2	10.0			QL=6 ST=2 TYP=3
	9400	TYKW	21	GRF	0530.0	0535.0	30.0	6.0	3.0		
	9400	TYKW	5	S	0541.5	0542.6	3.0	4.0	1.5		
	3750	TYKW	5	S	0545.0	0548.2	6.0	5.0	3.0		
	2000	TYKW	5	S	0545.0	0549.0	15.0	1.0	0.3		
	3750	TYKW	29	PBI	0551.0		20.0	3.0	1.5		
	9400	TYKW	45	C	0634.0	0635.1	1.5	11.0	3.0		

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
09	9400	TYKW	20	GRF	0713.0	0728.0	70.0	6.0	3.0		
	9100	GORK	20	GRF	0714.2	0736.1	94.0	10.0			
	3750	TYKW	20	GRF	0715.0	0728.0	105.0	6.0	3.0		
	2000	TYKW	20	GRF	0720.0	0755.0	90.0	3.0	1.5		INTERFERENCE
	6100	KISV	45	C	1202.3	1204.3	3.0	6.0			
	6100	KISV	29	PBI	1202.3	1205.5	13.0	3.0			
	2800	OTTA	2	S/F	1202.5	1202.8	3.0	6.0	2.6		
	3000	POTS	3	S	1202.5	1203.8	2.5	8.5			
	2695	ATHN	4	S/F	1202.6	1203.6	3.7	8.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	1203.0	1204.5	3.5	8.0			QL=6 ST=2 TYP=3
	9400	HUAN	20	GRF	1203.0	1206.3	12.5	7.9	3.8		0
	930	BORD	41	F	1203.2	1203.6	.5	29.0	2.0		
	810	KRAK	8	S	1203.3	1203.5	.3	42.0			
	1470	POTS	2	S/F	1203.3	1203.9	1.2	4.0			
	113	POTS	42	SER	1221.2	1225.1	6.9	400.0	2.0		III
	260	ONDR	8	S	1225.2	1225.2	.5	24.0			
	2800	OTTA	20	GRF	1300.0	1308.0	30.0	3.6	1.6		
	8800	ATHN	4	S/F	1325.3	1327.6	4.5	15.0			QL=5 ST=2 TYP=3
	2695	PENT	240	R	1403.0	1407.0	4.0	1.6	0.8		
	9400	HUAN	3	S	1410.5	1412.0	3.9	77.5	28.6		L
	8800	ATHN	47	GB	1410.6	1412.1	3.9	92.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	1410.8	1412.3	3.7	64.0			QL=6 ST=2 TYP=5
	2650	DWIN	1	S	1411.0	1411.0	4.0	45.0	20.0		
	19600	BERN	4	S/F	1411.0	1411.7	18.0	67.0			
	11800	BERN	4	S/F	1411.0	1411.8	18.0	106.0			
	9500	POTS	29	PBI	1411.0	1412.0	29.0	76.0			
	5200	BERN	3	S	1411.0	1412.1	18.0	85.0			
	8400	BERN	3	S	1411.0	1412.1	18.0	100.0			
	3100	BERN	3	S	1411.0	1412.1	18.0	76.0			
	3000	POTS	29	PBI	1411.0E	1412.3	37.0D	51.0			
	15400	SGMR	47	GB	1411.3	1411.8	1.8	87.0			QL=3 ST=2 TYP=5
	2695	ATHN	4	S/F	1411.3	1412.3	3.2	46.0			QL=6 ST=2 TYP=3
	2695	PENT	3	S	1411.5	1412.2	3.5	42.0	14.0		
	1415	ATHN	4	S/F	1411.6	1412.3	5.7	19.0			QL=6 ST=2 TYP=3
	1470	POTS	29	PBI	1412.0E	1412.6	36.0D	9.0			
	930	BORD	45	C	1412.4	1412.9	.8	25.0	5.0		
	9400	HUAN	29	PBI	1414.1	1414.1	23.4	9.5	6.3		0
	2800	OTTA	29	PBI	1415.0	1415.0	75.0	5.2	2.6		
	2800	OTTA	21	GRF	1545.0	1700.0	195.0	4.6	3.0		
	930	BORD	46	C	1545.4	1545.7	.7	27.0	3.0		
	2800	OTTA	40	F	1732.5	1737.5	10.0	2.2			
	9400	HUAN	21	GRF	1733.7	1742.0	24.7	4.7	2.5		0
	9400	HUAN	1	S	1736.2	1737.5	3.4	11.1	8.1		0
	245	SGMR	47	GB	1741.8	1742.0	.5	54.0			QL=6 ST=2 TYP=5
	9400	HUAN	2	S/F	1748.5	1750.8	3.5	7.9	5.2		0
	2800	OTTA	1	S	1749.0	1751.2	8.0	5.2	1.8		
	410	SGMR	8	S	1826.6	1827.0	.7	24.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1834.8	1835.0	.5	20.0			QL=6 ST=2 TYP=3
	410	PALE	8	S	1834.8	1835.3	.7	26.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	2020.8	2021.4	2.0	4.0	2.0		
	500	HIRA	8	S	2022.0	2022.0	.4	60.0			0
	2800	OTTA	20	GRF	2105.0	2110.0	40.0	4.0	1.8		
	3750	TYKW	5	S	2129.0	2129.5	2.0	3.5	2.0		
	3750	TYKW	29	PBI	2131.0		15.0	2.0	1.0		
	2000	TYKW	28	PRE	2230.0	2304.0	34.0	4.0	1.0		
	9400	TYKW	28	PRE	2300.0	2301.0	3.5	6.0	3.5		
	3750	TYKW	28	PRE	2300.0	2301.1	3.0	4.0	2.0		
	100	HIRA	48	C	2302.1	2305.5U	85.0	10000.0D	510.0D		
	3750	TYKW	47	GB	2303.0	2307.2	15.0	520.0	140.0		
	1415	LEAR	47	GB	2303.0	2305.3	13.3	189.0			QL=6 ST=2 TYP=5
	410	LEAR	49	GB	2303.0	2305.5	13.6	1199.0			QL=6 ST=2 TYP=6
	245	LEAR	49	GB	2303.0	2305.6	25.8	8300.0			QL=6 ST=2 TYP=6
	15400	LEAR	49	GB	2303.0	2305.8	19.0	920.0			QL=6 ST=2 TYP=6
	8800	LEAR	49	GB	2303.0	2306.1	26.6	1199.0			QL=6 ST=2 TYP=6
	610	LEAR	47	GB	2303.0	2306.8	14.0	200.0			QL=6 ST=2 TYP=5
	4995	LEAR	49	GB	2303.0	2306.8	26.6	590.0			QL=6 ST=2 TYP=6
	2695	LEAR	47	GB	2303.0	2307.5	25.8	310.0			QL=6 ST=2 TYP=5
	15400	SGMR	49	GB	2303.1	2305.6	6.2	1000.0			QL=4 ST=3 TYP=7
	9400	TYKW	47	GB	2303.5	2306.4	16.5	1670.0	340.0		
	8800	PALE	49	GB	2303.6	2305.6	23.2	2000.0			QL=6 ST=2 TYP=7
	500	HIRA	45	C	2303.6	2308.3	34.0	400.0	150.0		MR

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
09	200	HIRA	48	C	2303.6	2309.3	31.0	17000.0	920.0		0
	245	SGMR	49	GB	2303.8	2305.6	18.2	9800.0			QL=4 ST=3 TYP=7
	4995	SGMR	49	GB	2303.8	2306.3	7.0	800.0			QL=4 ST=3 TYP=7
	2000	TYKW	45	C	2304.0	2305.5	14.0	220.0	60.0		
	208	VORO	48	C	2304.0	2306.0	8.0	300.0D			
	2000	TYKW			2304.0	2307.2		220.0			
	2695	PENT	46F	C	2304.0	2307.2	14.0	320.0	98.0		
	1000	TYKW	45	C	2304.0	2307.3	16.0	157.0	50.0		
	410	PALE	49	GB	2304.0	2305.5	13.1	2300.0			QL=6 ST=2 TYP=7
	17000	NOBE	46	C	2304.0	2305.6	7.3	1210.0			R
	4995	PALE	49	GB	2304.0	2306.3	17.8	820.0			QL=6 ST=2 TYP=7
	8800	SGMR	49	GB	2304.0	2306.3	7.3	1399.0			QL=4 ST=3 TYP=7
	208	VORO			2304.0	2310.0		300.0D			
	245	PALE	49	GB	2304.1	2305.6	15.7	13999.0			QL=6 ST=2 TYP=7
	15400	PALE	49	GB	2304.1	2305.6	18.7	1800.0			QL=6 ST=2 TYP=7
	610	PALE	49	GB	2304.1	2305.8	13.9	290.0			QL=6 ST=2 TYP=7
	1415	PALE	49	GB	2304.3	2305.5	12.0	230.0			QL=6 ST=2 TYP=7
	1415	SGMR	49	GB	2304.3	2305.5	5.8	169.0			QL=4 ST=3 TYP=7
	410	SGMR	49	GB	2304.3	2305.6	10.5	1600.0			QL=4 ST=3 TYP=7
	610	SGMR	49	GB	2304.3	2305.8	10.5	260.0			QL=4 ST=3 TYP=7
	2695	SGMR	49	GB	2304.3	2307.3	6.0	270.0			QL=4 ST=3 TYP=7
	35000	NAGO	5	S	2305.0	2306.0	6.0	356.0			
	35000	NAGO	29	PBI	2311.0	2311.0	10.0	93.0			
	17000	NOBE	29	PBI	2311.3	2311.3	45.0	79.0			0
	2000	TYKW	30	PBI	2318.0		35.0	6.0	2.0		
	3750	TYKW	30	PBI	2318.0		35.0	16.0	8.0		
	2695	PENT	29	PBI	2318.0	2318.0	22.0	9.8	3.2		
	1000	TYKW	29	PBI	2320.0		30.0	4.0	2.0		
	9400	TYKW	29	PBI	2320.0		35.0	45.0	16.0		
	2000	TYKW	45	C	2326.0	2329.6	6.0	1.5	0.5		
	3750	TYKW	5	S	2329.0	2329.5	2.0	4.0	1.5		
	2695	PENT	31	ABS	2340.0	2355.0	40.0	-2.6	-1.5		
10	245	LEAR	43	NS	0056.1	0056.3	520.9D	18.0			QL=6 ST=2 TYP=1
	245	SGMR	43	NS	1830.0	1859.1		38.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	1936.0E	2009.0	90.0D	10.0	5.0		MR
	100	HIRA	44	NS	1936.0E	2013.0	90.0D	140.0	25.0		
	208	VORO	44	NS	2100.0E		240.0D				
	245	PALE	43	NS	2220.0	2314.1	364.0D	56.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	2303.0	0843.8	633.0D	77.0			QL=6 ST=3 TYP=1
	410	LEAR	20	GRF	0001.6	0005.3	11.2	13.0			QL=6 ST=3 TYP=2
	2695	PENT	240	AR	0003.0	0041.0	38.0	5.8	2.8		
	2695	PENT	4	S/F	0004.0	0005.5	6.0	13.6	4.6		
	410	PALE	8	S	0004.3	0005.6	1.8	22.0			QL=6 ST=2 TYP=3
	1415	LEAR	47	GB	0004.5	0005.1	.6	50.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	0004.6	0005.1	.7	51.0			QL=5 ST=2 TYP=5
	410	LEAR	20	GRF	0004.6	0005.6	1.0	13.0			QL=6 ST=2 TYP=2
	3750	TYKW	20	GRF	0011.0	0019.0	35.0	3.0	1.5		
	245	LEAR	8	S	0011.0	0011.1	.3	30.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0042.1	0042.1	.2	18.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0042.5	0042.6	.1	30.0			QL=6 ST=2 TYP=3
	2000	TYKW	20	GRF	0100.0	0130.0	60.0	2.0	1.0		
	3750	TYKW	20	GRF	0104.0	0130.0	60.0	2.0	1.0		
	200	HIRA	27	RF	0120.0	0312.0	176.0	7.0	3.0		0
	9400	TYKW	20	GRF	0145.0	0150.0	45.0	4.0	2.0		
	2000	TYKW	21	GRF	0210.0	0400.0	270.0	2.0	1.0		
	3750	TYKW	21	GRF	0235.0	0430.0	240.0	4.0	2.0		
	245	LEAR	8	S	0251.3	0251.3	.7	6.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0251.3	0251.3	.3	33.0			QL=6 ST=2 TYP=3
	9400	TYKW	20	GRF	0253.0	0310.0	45.0	4.0	2.0		
	3750	TYKW	5	S	0256.0	0257.7	3.0	7.0	3.5		
	2000	TYKW	5	S	0257.0E	0257.6	3.0D	3.0	1.0D		
	3750	TYKW	29	PBI	0259.0		25.0	3.0	1.5		
	2902	YUNN	5	S	0321.0	0322.5	3.0	6.0			
	3750	TYKW	20	GRF	0330.0	0340.0	35.0	3.0	1.0		
	2000	TYKW	5	S	0339.0	0340.7	7.0	2.0	0.7		
	6100	KISV			0348.3	0352.8		30.0			
	6100	KISV	46	C	0348.3	0400.0	11.7U	130.0			
	6100	KISV			0348.3	0401.0		95.0			
	6100	KISV			0348.3	0403.3		50.0			
	6100	KISV	29	PBI	0405.5	0405.5	36.0	25.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
10	245	LEAR	47	GB	0438.3	0438.6	.5	50.0			QL=6 ST=3 TYP=5
	8800	ATHN	4	S/F	0438.6	0441.0	4.4	13.0			QL=5 ST=2 TYP=3
	3750	TYKW	21	GRF	0500.0	0530.0	70.0	4.0	2.0		
	3750	TYKW	5	S	0522.0	0524.0	5.0	5.0	1.5		
	6100	KISV	45	C	0523.2	0523.9	7.0	4.0			
	6100	KISV			0523.2	0526.4		3.0			
	6100	KISV	1	S	0614.4	0615.3	1.5	4.0			
	6100	KISV	1	S	0724.3	0725.1	1.0	4.0			
	430	KRAK	8	S	0741.8	0741.8	.1	26.0			
	6100	KISV	21	GRF	0756.5	0824.1	54.0	12.0			
	6100	KISV	1	S	0809.6	0810.5	1.0	3.0			
	430	KRAK	8	S	0830.5	0830.5	.1	16.0			
	430	KRAK	8	S	0916.5	0916.5	.1	15.0			
	9100	GORK	20	GRF	1122.1	1155.4	40.0D	5.0			
	9400	HUAN	2	S/F	1133.7	1135.4	2.3	11.3	4.5		0
	6100	KISV			1206.8	1210.3		75.0			
	930	BORD	45	C	1206.8	1210.4	146.0	161.0	16.0		
	6100	KISV	46	C	1206.8	1212.5	8.5	140.0			
	2800	OTTA	4	S/F	1207.0	1212.7	11.0	145.0	66.6		
	2650	DWIN	45	C	1207.0	1213.0	10.0	130.0	60.0		
	1470	POTS	45	C	1207.0	1212.4	23.0	118.0			
	3000	POTS	45	C	1207.0	1212.5	23.0	141.0			
	5200	BERN	3	S	1207.3	1212.0	13.0	268.0			
	2695	ATHN	47	GB	1207.3	1212.3	11.0	130.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	1207.3	1212.3	14.5	300.0			QL=6 ST=2 TYP=5
	8400	BERN	3	S	1207.3	1212.4	13.0	216.0			
	3100	BERN	3	S	1207.3	1212.6	13.0	216.0			
	11800	BERN	3	S	1207.3	1212.6	13.0	142.0			
	19600	BERN	3	S	1207.3	1212.6	13.0	92.0			
	3100	CRIM	3	S	1207.5	1213.0	11.0	179.0	60.0		
	2695	SGMR	47	GB	1207.6	1212.3		169.0			QL=6 ST=1 TYP=5
	9400	HUAN	4	S/F	1207.6	1212.3	8.9	137.4	51.2		R
	8800	ATHN	47	GB	1207.6	1212.3	14.0	160.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	1207.8	1212.3		200.0			QL=6 ST=1 TYP=5
	808	ONDR	46	C	1208.0	1212.0	15.0	202.0	50.0		
	9500	POTS	45	C	1208.2	1212.5	22.0,	130.0			
	8800	SGMR	47	GB	1208.3	1212.3		139.0			QL=6 ST=1 TYP=5
	810	KRAK	4	S/F	1208.5	1212.2	9.0	140.0	32.0		
	15400	SGMR	47	GB	1208.6	1212.3		100.0			QL=6 ST=1 TYP=5
	1415	ATHN	47	GB	1208.6	1212.3	9.2	110.0			QL=6 ST=2 TYP=5
	430	KRAK	47	GB	1209.0	1210.5	8.5	540.0D	170.0		
	536	ONDR	46	C	1209.0	1211.5	10.0	260.0	97.0		
	1415	SGMR	47	GB	1209.0	1212.1		130.0			QL=6 ST=1 TYP=5
	430	KRAK			1209.0	1212.3U		540.0D			
	234	POTS	4	S/F	1210.1	1210.4	11.0	300.0	2.0		III/V
	113	POTS	4	S/F	1210.1	1214.3	5.7	900.0	15.0		III
	6100	KISV	29	PBI	1214.3	1215.5	40.0	25.0			
	9400	HUAN	29	PBI	1216.5	1216.5	15.0	12.7	6.4		R
	2800	OTTA	30	PBI	1218.0	1218.0	335.0	8.6	4.0		
	3100	CRIM	29	PBI	1218.0	1218.5	28.0	6.0	2.0		
	810	KRAK	7	C	1218.0	1220.7	4.0	10.0	4.0		
	430	KRAK	4	S/F	1218.0	1220.7	4.5	100.0	34.0		
	610	SGMR	47	GB	1218.1	1220.6	6.5	83.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	1218.6	1219.6	3.9	56.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	1218.8	1220.6	5.0	90.0			QL=6 ST=2 TYP=5
	260	ONDR	45	C	1219.0	1219.5	4.0	71.0	42.0		
	536	ONDR	46	C	1219.0	1221.0	5.0	42.0	32.0		
	6100	KISV	2	S/F	1307.6	1310.1	3.5	4.0			
	245	SGMR	47	GB	1315.1	1318.6	4.5	139.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1358.1	1358.3	.2	110.0			QL=6 ST=2 TYP=5
	2800	OTTA	20	GRF	1450.0	1525.0	80.0	4.6	2.8		
	2800	OTTA	20	GRF	1620.0	1650.0	80.0	5.2	2.8		
	2800	OTTA	20	GRF	1815.0	1845.0	165.0	10.4	3.6		
	245	PALE	8	S	1828.6	1830.1	1.5	19.0			QL=5 ST=2 TYP=3
	9400	HUAN	20	GRF	1839.0	1844.3	11.9	14.2	7.1		L
	245	PALE	8	S	1858.6	1859.0	.5	46.0			QL=5 ST=2 TYP=3
	9400	HUAN	2	S/F	1920.4	1922.0	3.4	14.9	9.8		R
	9400	HUAN	29	PBI	1923.8	1923.8	15.4	5.7	3.3		R
	245	PALE	47	GB	2026.3	2026.3	.3	69.0			QL=5 ST=2 TYP=5
	2800	OTTA	20	GRF	2110.0	2135.0	40.0	1.8	1.0		
	2800	OTTA	20	GRF	2200.0	2215.0	30.0	2.4	1.2		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
10	1000	TYKW	45	C	2213.0	2213.6	4.0	3.0	1.0		
	1000	TYKW	45	C	2218.0	2219.5	3.0	16.0	2.0		
	2930	VORO	47	GB	2300.0	2308.0	60.0	7601.0			
	2695	PENT	240	R	2325.0	2340.0	15.0	3.4	1.7		
	3750	TYKW	20	GRF	2330.0	2345.0	30.0	2.0	1.0		
	9400	TYKW	5	S	2345.0	2347.0	15.0	3.0	1.5		
11	410	LEAR	43	NS	0113.5	0828.6	502.5D	36.0			QL=6 ST=2 TYP=1
	200	HIRA	43	NS	0246.0	0850.0	420.0	50.0	5.0		WL
	9100	GORK	44	NS	0300.0E		90.0D		5.0		
	260	ONDR	44	NS	0544.0E		503.0D	94.0			
	204	IZMI	43	NS	0600.0		360.0	40.0			
	127	TORN	43	NS	0812.0		448.0		73.0		V=1
	100	GORK	43	NS	0814.1		226.0D		30.0		
	33	UPIC	43	NS	0841.9	1104.2	558.1D				
	29	UPIC	43	NS	0842.0	1103.9	558.0D				
	245	SGMR	43	NS	1101.3	1539.6	749.7D	219.0			QL=6 ST=2 TYP=1
	245	PALE	44	NS	1634.0E	2011.1		520.0			QL=6 ST=3 TYP=1
	200	HIRA	44	NS	1934.0E	0607.0	835.0D	290.0	60.0		MR
	208	VORO	44	NS	2300.0E		290.0D		28.0		
	245	LEAR	43	NS	2304.0	0244.3	632.0D	330.0			QL=6 ST=2 TYP=1
	410	LEAR	43	NS	2304.0	0856.1	632.0D	76.0			QL=6 ST=2 TYP=1
	9400	TYKW	21	GRF	0003.0	0043.0	85.0	4.0	2.0		
	3750	TYKW	45	C	0004.0	0005.4	5.0	15.0	5.0		
	8800	LEAR	4	S/F	0004.6	0005.5	2.9	22.0			QL=5 ST=2 TYP=3
	15400	LEAR	47	GB	0004.8	0005.6	3.7	72.0			QL=5 ST=2 TYP=5
	245	LEAR	47	GB	0004.8	0006.8	5.3	139.0			QL=5 ST=2 TYP=5
	17000	NOBE	3	S	0004.9	0005.6	3.5	115.0			0
	1000	TYKW	45	C	0005.0	0005.8	4.0	8.0	2.5		
	8800	PALE	47	GB	0005.0	0005.6	1.5	80.0			QL=6 ST=2 TYP=5
	4995	LEAR	4	S/F	0005.1	0005.6	2.7	11.0			QL=5 ST=2 TYP=3
	15400	PALE	47	GB	0005.1	0005.6	2.4	139.0			QL=6 ST=2 TYP=5
	2695	LEAR	4	S/F	0005.1	0005.8	2.7	11.0			QL=5 ST=2 TYP=3
	4995	PALE	8	S	0005.3	0005.6	.5	18.0			QL=6 ST=2 TYP=3
	410	LEAR	4	S/F	0005.3	0007.8	4.2	4.0			QL=5 ST=2 TYP=3
	35000	NAGO	5	S	0006.0	0006.0	2.0	68.0			
	208	VORO	41	F	0006.0	0007.0	3.0	200.0D			
	610	PALE	8	S	0006.3	0006.8	.5	13.0			QL=6 ST=2 TYP=3
	200	HIRA	42	SER	0006.3	0006.8	9.0	1200.0			0
	245	PALE	47	GB	0006.5	0006.6	.6	169.0			QL=6 ST=2 TYP=5
	100	HIRA	42	SER	0006.5	0006.7	6.0	1900.0			
	9400	TYKW	5	S	0007.0E	0007.0U	3.0D	20.0	5.0D		
	2000	TYKW	21	GRF	0015.0	0100.0	140.0	2.0	1.0		
	200	HIRA	46	C	0015.6	0018.0	10.0	14.0	3.0		0
	3750	TYKW	21	GRF	0018.0	0043.0	135.0	5.0	2.0		
	2695	PENT	1	S	0021.5	0021.8	1.0	3.2	1.6		
	200	HIRA	27	RF	0043.0	0100.0	32.0	6.0	4.0		0
	500	HIRA	22	GRF	0110.0	0143.5	125.0	10.0	4.0		SR
	3750	TYKW	21	GRF	0122.0	0132.0	65.0	2.0	1.0		
	2000	TYKW	20	GRF	0125.0	0140.0	60.0	2.0	1.0		
	3750	TYKW	21	GRF	0134.0	0137.0	35.0	5.0	2.0		
	9400	TYKW	20	GRF	0134.0	0150.0	50.0	3.0	1.5		
	3750	TYKW	5	S	0139.5	0140.3	2.5	2.0	0.7		
	3750	TYKW	21	GRF	0240.0	0250.0	55.0	2.0	1.0		
	9400	TYKW	45	C	0243.0	0245.4	15.0	12.0	6.0		
	3750	TYKW	5	S	0245.0	0245.3	2.5	2.0	0.7		
	9400	TYKW	29	PBI	0258.0		35.0	4.0	2.0		
	100	GORK	46	C	0305.1	0318.9	49.0	12.0			
	100	GORK			0305.1	0343.6		15.0			
	3750	TYKW	5	S	0315.0	0320.0	15.0	3.0	1.0		
	3750	TYKW	45	C	0340.0	0400.0	50.0	119.0	17.0		
	650	GORK	21	GRF	0341.4	0434.3	392.0	13.0			
	2000	TYKW	28	PRE	0342.0	0350.0	8.0	3.0	1.5		
	9400	TYKW	45	C	0342.0	0400.0	48.0	150.0	30.0		
	9100	GORK	21	GRF	0342.0	1146.3	498.0D	45.0			
	2950	GORK	21	GRF	0342.4	1124.0	500.0D	27.0			
	9395	PEKG	46	C	0344.0	0400.0	22.5	137.0	39.3		
	1000	TYKW	45	C	0348.0	0359.9	20.0	85.0	16.0		
	2902	YUNN	45	C	0348.0	0400.0	38.0	101.0			
	3653	YUNN	45	C	0348.0	0400.0	37.0	115.0			
	950	GORK	46	C	0348.0	0352.5	25.0	55.0			

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean	Int	Remarks
11	950	GORK		0348.0	0400.0		71.0			
	6100	KISV		0348.3	0352.8		30.0			
	6100	KISV	46 C	0348.3	0400.0	17.0	130.0			
	6100	KISV		0348.3	0401.0		95.0			
	6100	KISV		0348.3	0403.3		50.0			
	4995	ATHN	47 GB	0349.6E	0359.8	20.5D	130.0			QL=2 ST=2 TYP=5
	2000	TYKW	45 C	0350.0	0400.0	16.0	64.0	17.0		
	500	HIRA	45 C	0350.0	0359.5	12.0	120.0	30.0		WL
	1415	ATHN	4 S/F	0350.0E	0400.1	14.3D	43.0			QL=2 ST=2 TYP=3
	650	GORK	46 C	0350.1	0350.8	3.7	26.0			
	650	GORK	46 C	0350.1	0352.6		39.0			
	8800	ATHN	47 GB	0350.1E	0400.1	20.0D	119.0			QL=2 ST=2 TYP=5
	610	PALE	4 S/F	0350.5	0352.5	2.3	44.0			QL=6 ST=2 TYP=3
	2840	PEKG	46 C	0351.0	0400.0	16.0	86.5	12.6		
	9100	GORK	1 S	0351.0	0352.5	3.6	15.0			
	2695	ATHN	47 GB	0351.1E	0400.0	13.2D	62.0			QL=2 ST=2 TYP=5
	4995	PALE	4 S/F	0351.3	0352.6	2.8	34.0			QL=6 ST=2 TYP=3
	2950	GORK	3 S	0351.6	0352.6	3.7	19.0			
	1415	PALE	8 S	0351.8	0352.5	1.0	23.0			QL=6 ST=2 TYP=3
	650	GORK	4 S/F	0354.8	0400.0	9.3	50.0			
	1415	PALE	47 GB	0355.8	0359.8	7.2	70.0			QL=6 ST=2 TYP=5
	410	LEAR	49 GB	0356.3	0401.1	6.5	790.0			QL=6 ST=2 TYP=6
	610	LEAR	47 GB	0356.6	0401.1	7.4	230.0			QL=6 ST=2 TYP=5
	410	PALE	49 GB	0356.8	0401.1	5.8	800.0			QL=6 ST=2 TYP=6
	35000	NAGO	20 GRF	0357.0	0413.0	50.0	81.0			
	15400	PALE	47 GB	0357.0	0359.8	9.1	119.0			QL=6 ST=2 TYP=5
	1415	LEAR	47 GB	0357.1	0400.1	7.2	76.0			QL=6 ST=2 TYP=5
	610	PALE	47 GB	0357.3	0401.1	4.7	230.0			QL=6 ST=2 TYP=5
	9100	GORK	4 S/F	0358.0	0400.0	7.2	110.0			
	4995	LEAR	47 GB	0358.0	0400.1	7.5	130.0			QL=6 ST=2 TYP=5
	8800	LEAR	47 GB	0358.0	0400.1	7.6	139.0			QL=6 ST=2 TYP=5
	2695	LEAR	47 GB	0358.0	0400.1	7.0	72.0			QL=6 ST=2 TYP=5
	15400	LEAR	47 GB	0358.0	0401.0	7.3	100.0			QL=6 ST=2 TYP=5
	2950	GORK	4 S/F	0358.1	0400.0	5.6	62.0			
	245	LEAR	49 GB	0358.6	0401.0	2.7	1300.0			QL=6 ST=2 TYP=6
	8800	PALE	47 GB	0359.1	0359.8	3.9	119.0			QL=6 ST=2 TYP=5
	4995	PALE	47 GB	0359.1	0400.0	3.7	119.0			QL=6 ST=2 TYP=5
	245	PALE	49 GB	0400.8	0401.0	.5	1199.0			QL=6 ST=2 TYP=6
	500	HIRA	29 PBI	0402.0	0402.0	80.0	10.0	6.0		SR
	6100	KISV	29 PBI	0405.5	0405.5	36.0	25.0			
	2000	TYKW	30 PBI	0406.0		210.0	7.0	3.0		
	9395	PEKG	29 PBI	0406.5		21.5	36.0	18.0		
	1000	TYKW	30 PBI	0408.0		210.0	3.0	1.5		
	410	PALE	8 S	0408.1	0408.5	.5	13.0			QL=6 ST=2 TYP=3
	245	PALE	8 S	0408.6	0409.5	1.0	47.0			QL=6 ST=2 TYP=3
	1000	TYKW	21 GRF	0415.0	0612.0	130.0	2.0	1.0		
	9400	TYKW	30 PBI	0430.0		75.0	15.0	6.0		
	3750	TYKW	21 GRF	0430.0		80.0	7.0	4.0		
	3750	TYKW	20 GRF	0512.0	0527.0	35.0	2.0	1.0		
	9400	TYKW	5 S	0525.0	0530.0	15.0	4.0	2.0		
	8800	ATHN	4 S/F	0553.6	0554.6	3.7	28.0			QL=6 ST=2 TYP=3
	1000	TYKW	5 S	0554.0	0554.6	2.0	3.0	1.0		
	2000	TYKW	5 S	0554.0	0554.6	2.0	5.0	2.0		
	9400	TYKW	5 S	0554.0	0554.6	3.0	31.0	11.0		
	3750	TYKW	5 S	0554.0	0554.7	3.0	8.0	3.0		
	2000	TYKW	21 GRF	0554.0	0640.0	95.0	3.0	1.5		
	5200	BERN	4 S/F	0554.0	0554.8	5.5	23.0			
	8400	BERN	4 S/F	0554.0	0554.9	5.5	40.0			
	3100	BERN	3 S	0554.0	0555.3	5.5	9.0			
	4995	ATHN	4 S/F	0554.1	0554.6	3.2	11.0			QL=6 ST=2 TYP=3
	2695	ATHN	4 S/F	0554.1	0554.6	3.2	7.0			QL=6 ST=2 TYP=3
	650	GORK	1 S	0554.2	0554.3	.4	5.2	3.0		
	2950	GORK	1 S	0554.3	0554.7	2.2	4.7			
	9400	TYKW	5 S	0557.0	0559.0	6.0	4.0	2.0		
	3750	TYKW	5 S	0557.0	0600.0U	8.0	2.0	1.0D		
	9395	PEKG	3 S	0558.0	0558.7	4.0	28.6	8.6		
	9400	TYKW	21 GRF	0612.0	0621.0	75.0	8.0	4.0		
	3750	TYKW	21 GRF	0614.0	0630.0	75.0	4.0	2.0		
	6100	KISV	1 S	0614.1	0615.3	1.5	4.0			
	3750	TYKW	5 S	0654.0	0655.0	3.0	4.0	1.5		
	2950	GORK	1 S	0654.2	0654.7	2.0	4.7			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
11	9100	GORK	1	S	0654.4	0654.8	1.0	6.0	3.0		
	9400	TYKW	5	S	0654.5	0655.0	1.5	7.0	2.0		
	430	KRAK	42	SER	0712.5	0828.8	348.0D	67.0			
	430	KRAK			0712.5	0921.3		129.0			
	430	KRAK			0712.5	0934.5		85.0			
	430	KRAK			0712.5	1000.5		129.0			
	430	KRAK			0712.5	1243.0		112.0			
	9400	TYKW	5	S	0722.0	0725.0	10.0	6.0	3.0		
	6100	KISV	1	S	0724.3	0725.1	1.0	4.0			
	3750	TYKW	20	GRF	0734.0	0800.0	80.0	6.0	3.0		
	2000	TYKW	20	GRF	0750.0	0800.0	65.0	2.0	1.0		
	9100	GORK	3	S	0754.2	0754.6	2.3	28.0			
	6100	KISV	21	GRF	0756.5	0824.1	54.0	12.0			
	9100	GORK	1	S	0823.2	0824.0	1.5	8.0	4.0		
	245	LEAR	47	GB	0834.8	0835.8	1.0	119.0			QL=6 ST=2 TYP=5
	100	GORK	41	F	0843.2	0843.7	2.1	190.0			
	100	GORK			0843.2	0844.7		200.0D			
	610	LEAR	47	GB	0852.8	0853.1	2.3	73.0			QL=6 ST=2 TYP=5
	650	GORK	46	C	0853.2	0853.2	2.3	42.0			
	650	GORK			0853.2	0854.3		26.0			
	100	GORK	41	F	0942.4	0943.1	178.0	200.0			
	100	GORK			0942.4	0949.9		200.0			
	100	GORK			0942.4	0955.2		200.0			
	100	GORK			0942.4	0958.1		200.0D			
	100	GORK			0942.4	0959.6		200.0D			
	204	IZMI	41	F	0953.0	0953.2	19.0	480.0			
	536	ONDR	41	F	0958.0	0958.0	3.0	20.0			
	6100	KISV	25	R	0959.0	1130.0U		20.0D			
	9400	HUAN	2	S/F	1003.5	1005.0	2.6	18.3	9.9		0
	100	GORK	8	S	1007.8	1008.2	.8	200.0D			
	6100	KISV	22	GRF	1027.0	1030.5	17.0	5.0			
	2800	OTTA	23	GRF	1050.0	1500.0	660.0	18.8			
	2695	ATHN	20	GRF	1052.5	1108.0	26.5	7.0			QL=6 ST=2 TYP=2
	8800	ATHN	20	GRF	1052.5	1140.0	62.5	28.0			QL=6 ST=2 TYP=2
	1415	SGMR	4	S/F	1053.6	1055.5	3.7	20.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1054.5	1054.8	.5	13.0			QL=6 ST=2 TYP=3
	4995	ATHN	20	GRF	1057.3	1108.0	21.7	13.0			QL=6 ST=2 TYP=2
	1415	ATHN	20	GRF	1101.3	1108.0	17.7	18.0			QL=6 ST=2 TYP=2
	204	IZMI	41	F	1103.0	1104.0	6.0	210.0			
	113	POTS	4	S/F	1103.8	1104.8	1.8	200.0	45.0		III
	3100	CRIM	20	GRF	1107.0	1209.0	98.0D	13.0			
	3000	POTS	20	GRF	1112.0E	1123.5	18.0U	13.0			
	1470	POTS	20	GRF	1113.5	1124.0	17.0	5.0			
	2800	OTTA	1	S	1157.0	1157.3	5.0	3.8	1.8		
	2695	ATHN	4	S/F	1157.3	1157.5	2.2	7.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	1157.3	1157.5	2.2	7.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	1157.3	1157.5	2.2	7.0			QL=6 ST=2 TYP=3
	3000	POTS	1	S	1203.0	1204.0	2.0	3.0			
	2800	OTTA	1	S	1203.5	1204.0	1.0	3.2	1.5		
	1470	POTS	1	S	1203.5	1204.1	1.5	4.0			
	1415	ATHN	8	S	1203.6	1204.1	1.0	11.0			QL=6 ST=2 TYP=3
	2695	ATHN	8	S	1203.6	1204.1	1.0	9.0			QL=6 ST=2 TYP=3
	810	KRAK	2	S/F	1204.0	1204.0	.5	16.0	2.0		
	234	POTS	8	S	1207.6	1207.6	.7	150.0	50.0		
	6100	KISV	21	GRF	1221.0	1222.6	18.0	4.0			
	2695	SGMR	8	S	1226.1	1226.8	.7	15.0			QL=6 ST=2 TYP=3
	245	SGMR	4	S/F	1226.1	1226.8	2.4	47.0			QL=6 ST=2 TYP=3
	810	KRAK	1	S	1253.5	1254.0	.7	3.0	1.0		
	234	POTS	4	S/F	1303.9	1304.0	.6	30.0	27.5		
	1415	ATHN	20	GRF	1305.1	1316.0	64.4	11.0			QL=6 ST=2 TYP=2
	4995	ATHN	20	GRF	1306.5	1330.8	63.0	17.0			QL=6 ST=2 TYP=2
	8800	ATHN	20	GRF	1311.5	1330.8	58.0	39.0			QL=6 ST=2 TYP=2
	9500	POTS	20	GRF	1312.0	1326.0	28.0	24.0			
	2695	ATHN	20	GRF	1313.5	1344.3	56.0	7.0			QL=6 ST=2 TYP=2
	6100	KISV			1314.0	1318.0		4.0			
	6100	KISV			1314.0	1328.1		12.0			
	6100	KISV	46	C	1314.0	1330.9	21.0	13.0			
	9400	HUAN	21	GRF	1323.2	1326.2	12.4	12.2	6.2		0
	8800	SGMR	4	S/F	1323.6	1326.3	7.5	25.0			QL=6 ST=2 TYP=3
	15400	SGMR	20	GRF	1323.8	1325.8	8.5	51.0			QL=6 ST=2 TYP=2
	9400	HUAN	2	S/F	1330.2	1330.8	1.4	6.1	2.4		0

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
11	4995	SGMR	8	S	1330.6	1330.8	.5	13.0			QL=6 ST=2 TYP=3
	9400	HUAN	22	GRF	1342.1	1445.0	63.1U	4.6	1.6		0
	410	SGMR	4	S/F	1403.6	1417.0	15.7	41.0			QL=6 ST=3 TYP=3
	3000	POTS	23	GRF	1418.0U	1444.8	58.0U	31.0			
	8400	BERN	23	GRF	1418.0	1449.1	45.0U	208.0			
	5200	BERN	23	GRF	1418.0	1449.1	45.0U	241.0			
	3100	BERN	23	GRF	1418.0	1449.1	45.0U	181.0			
	9400	HUAN	23	GRF	1418.3	1440.9	61.4	18.3	5.0		R
	2800	OTTA	2	S/F	1418.5	1421.0	8.0	9.2	4.4		
	1470	POTS	23	GRF	1418.5E	1444.5	62.0D	10.0			
	9500	POTS	23	GRF	1419.0	1432.5	61.0	24.0			
	610	SGMR	8	S	1419.3	1420.6		24.0			QL=6 ST=1 TYP=3
	127	TORN	4	S/F	1424.8	1425.3	2.0	420.0D	210.0D		
	2800	OTTA	28	PRE	1430.0	1444.8	17.2	20.0			
	113	POTS	42	SER	1431.0	1432.5	19.0	200.0	10.0		III
	1470	POTS	4	S/F	1432.0	1433.7	3.0	8.0			
	3000	POTS	4	S/F	1432.2	1433.5	2.3	23.0			
	127	TORN	42	SER	1439.8	1444.8	11.0	120.0D			
	234	POTS	4	S/F	1442.7	1449.8	10.0	1100.0	250.0		III
	2650	DWIN	45	C	1445.0	1454.0	10.0	125.0	60.0		
	3000	POTS	4	S/F	1446.5	1449.2	8.5	157.0			
	1470	POTS	4	S/F	1447.0	1449.2	7.5	44.0			
	2800	OTTA	45	C	1447.2	1449.0	8.5	144.0	38.6		
	9400	HUAN	4	S/F	1447.3	1448.9	6.0	103.6	29.6		R
	9500	POTS	4	S/F	1447.5	1449.0	6.5	107.0			
	2800	OTTA	1	S	1512.5	1514.0	3.0	2.8	1.3		
	3100	BERN	3	S	1612.6	1613.6	6.0	35.0			
	8400	BERN	4	S/F	1612.6	1613.8	6.0	27.0			
	9400	HUAN	1	S	1612.6	1613.8	3.0	12.2	7.4		R
	5200	BERN	4	S/F	1612.6	1613.9	6.0	33.0			
	2800	OTTA	4	S/F	1612.8	1613.7	5.0	27.0	6.8		
	2650	DWIN	1	S	1613.0	1614.0	2.0	30.0	10.0		
	9400	HUAN	20	GRF	1850.4	1906.2U	30.3	9.1	5.0		0
	2800	OTTA	1	S	1930.2	1930.8	1.5	6.6	3.3		
	610	PALE	8	S	1930.5	1930.6	.3	21.0			QL=5 ST=2 TYP=3
	2800	OTTA	1	S	1932.3	1932.5	1.0	7.8	2.6		
	4995	SGMR	4	S/F	1940.1	1941.3	3.0	43.0			QL=6 ST=2 TYP=3
	2695	SGMR	4	S/F	1940.1	1941.5	3.0	21.0			QL=6 ST=2 TYP=3
	2800	OTTA	3	S	1940.2	1941.5	8.0	13.8	3.6		
	9400	HUAN	1	S	1940.3	1946.5	6.2U	19.8	10.0		L
	4995	PALE	8	S	1940.8	1941.3	1.7	34.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1941.0	1941.6	2.0	18.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	1941.1	1941.5	1.2	29.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	2004.3	2004.6	1.0	29.0			QL=6 ST=2 TYP=3
	15400	PALE	8	S	2004.5	2004.6	.3	39.0			QL=6 ST=2 TYP=3
	2695	PENT	1	S	2006.0	2006.7	2.0	2.4	1.2		
	15400	PALE	8	S	2059.0	2059.1	.3	28.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	2059.1	2059.1	.2	16.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	2108.0	2108.1	.3	180.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2111.0	2111.1	.3	230.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2122.5	2122.6	1.0	420.0			QL=6 ST=2 TYP=5
	9400	TYKW	21	GRF	2155.0	2236.0	95.0	8.0	4.0		
	9400	TYKW	5	S	2158.0	2200.0	7.0U	9.0	3.0		INTERFERENCE
	2695	PENT	240	AR	2205.0	2220.0	15.0	3.8	1.9		
	3750	TYKW	21	GRF	2206.0	2233.0	70.0	6.0	3.0		
	3750	TYKW	5	S	2207.0	2208.1	3.0	11.0	3.0		
	2800	OTTA	1	S	2207.8	2208.0	1.2	2.4	1.2		
	9400	TYKW	5	S	2213.0	2214.1	2.5	6.0	2.0		
	2000	TYKW	20	GRF	2213.0	2236.0	80.0	3.0	1.5		
	1000	TYKW	45	C	2213.5	2214.9	2.5	4.0	1.5		
	1000	TYKW	45	C	2217.5	2219.3	2.5	19.0	1.5		
	9400	TYKW	5	S	2228.5	2228.8	1.5	3.0	1.0		
	245	PALE	47	GB	2228.5	2231.1	3.1	460.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	2229.3	2230.8	2.0	75.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	2230.1	2230.6	.7	100.0			QL=6 ST=2 TYP=5
	245	PALE	49	GB	2238.3	2239.1	1.5	590.0			QL=6 ST=2 TYP=6
	410	PALE	47	GB	2238.6	2238.6	.4	57.0			QL=6 ST=2 TYP=5
	610	PALE	8	S	2239.3	2239.3	.3	37.0			QL=6 ST=2 TYP=3
	3750	TYKW	45	C	2258.0	2300.2	6.0	1.5	0.5		
	1415	PALE	47	GB	2309.6	2309.8	1.0	130.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2309.6	2310.3	2.5	310.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
11	410	PALE	47	GB	2310.3	2310.3	.3	53.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	2318.3	2318.6	3.0	130.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2318.3	2318.6	.5	320.0			QL=6 ST=2 TYP=5
	9400	TYKW	45	C	2336.0	2338.1	4.0	35.0	12.0		
	3750	TYKW	45	C	2336.0	2338.2	7.0	25.0	6.0		
	610	LEAR	4	S/F	2336.3	2336.8	3.8	33.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	2336.3	2337.0	1.0	5.0	1.0		
	2695	PENT	3	S	2337.2	2338.5	3.0	12.0	6.0		
	2000	TYKW	45	C	2337.3	2338.5	6.0	14.0	3.0		
	8800	LEAR	8	S	2337.6	2338.0	1.2	30.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	2337.6	2338.0	1.7	33.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	2337.6	2338.0	1.7	38.0			QL=6 ST=2 TYP=3
	4995	PALE	8	S	2337.6	2338.1	1.7	32.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	2337.6	2338.5	1.2	20.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	2337.7	2338.3	2.0	12.0	3.0		
	1415	LEAR	8	S	2338.0	2339.1	1.3	20.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	2338.6	2338.8	1.9	13.0			QL=6 ST=2 TYP=3
	9400	TYKW	30	PBI	2340.0		7.0	10.0	4.0		
	9400	TYKW	5	S	2343.4	2343.8	1.0	9.0	3.0		
	2000	TYKW	21	GRF	2345.0	0016.0	85.0	2.0	1.0		
	2695	PENT	21	GRF	2348.0		80.0	4.6			
	3750	TYKW	45	C	2349.0	2351.7	6.0	11.0	4.0		
	1000	TYKW	5	S	2349.0	2351.7	5.0	2.0	0.7		
	1415	LEAR	4	S/F	2349.1	2351.8	8.9	8.0			QL=6 ST=2 TYP=3
	9400	TYKW	21	GRF	2350.0	0008.0	105.0	4.0	2.0		
	2000	TYKW	45	C	2350.0	2351.8	7.0	15.0	6.0		
	2695	LEAR	4	S/F	2350.1	2351.8	8.0	17.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	2350.1	2351.8	8.9	9.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	2351.0	2351.7	3.0	3.0	1.0		
	2695	PENT	4	S/F	2351.0	2351.8	4.0	12.6	6.3		
	3750	TYKW	30	PBI	2355.0		75.0	4.0	2.0		
	2000	TYKW	29	PBI	2357.0		7.0	2.0	1.0		
12	100	GORK	44	NS	0300.0E		540.0D		10.0		
	33	UPIC	44	NS	0400.0E		840.0D				
	29	UPIC	44	NS	0400.0E		840.0D				
	260	ONDR	44	NS	0550.0E		497.0D	40.0			
	204	IZMI	44	NS	0600.0E		360.0D	150.0			
	430	KRAK	44	NS	0653.0E	0856.5	367.0D	320.0	14.0		
	245	SGMR	43	NS	0947.0	1841.1	825.0D	270.0			QL=6 ST=2 TYP=1
	127	TORN	44	NS	1120.0E		210.0D		12.0		V=1
	100	HIRA	44	NS	1934.0E	2014.0	150.0D	250.0	85.0		
	200	HIRA	44	NS	1934.0E	2032.0	835.0D	110.0	35.0		SR
	208	VORO	44	NS	2100.0E		360.0D		41.0		
	3750	TYKW	5	S	0008.0	0011.0	11.0	1.5	0.7		
	9400	TYKW	5	S	0009.0	0011.0	10.0	4.0	2.0		
	1000	TYKW	5	S	0014.0	0014.3	1.0	1.0	0.3		
	1000	TYKW	5	S	0018.0	0018.3	1.0	2.5	1.0		
	3750	TYKW	5	S	0021.0	0022.0	3.0	7.0	2.0		
	2000	TYKW	5	S	0021.5	0021.9	2.5	4.0	1.0		
	9400	TYKW	45	C	0021.5	0022.2	11.0	6.0	2.0		
	3750	TYKW	30	PBI	0024.0		10.0	1.5	0.7		
	245	LEAR	47	GB	0024.0	0024.5	1.1	110.0			QL=1 ST=2 TYP=5
	3750	TYKW	45	C	0027.0	0029.0	6.0	12.0	2.0		
	9400	TYKW	5	S	0035.0	0037.5	8.0	12.0	6.0		
	15400	LEAR	4	S/F	0035.0	0039.1	4.3	13.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0036.1	0037.3	1.4	11.0			QL=6 ST=2 TYP=3
	9400	TYKW	29	PBI	0043.0		25.0	4.0	2.0		
	9395	PEKG	28	PRE	0120.0		92.0	17.1	11.6		
	3750	TYKW	45	C	0141.0	0156.0	32.0	8.0	3.5		
	9400	TYKW	45	C	0142.0	0155.3	25.0	28.0	12.0		
	8800	LEAR	20	GRF	0145.0	0155.1	20.5	25.0			QL=6 ST=2 TYP=2
	15400	LEAR	20	GRF	0145.0	0155.1	24.8	26.0			QL=6 ST=2 TYP=2
	2840	PEKG	45	C	0147.0	0155.2	21.0	5.0	2.6		
	2000	TYKW	5	S	0147.5	0148.2	1.5	2.0	0.5		
	9395	PEKG	45	C	0152.0	0155.3	13.0	21.0	13.7		
	2000	TYKW	5	S	0154.0	0155.0	6.0	1.5	0.5		
	410	PALE	8	S	0158.3	0158.5	.3	27.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	0159.0	0159.8	2.1	360.0			QL=6 ST=2 TYP=5
	9400	TYKW	30	PBI	0207.0		155.0	9.0	3.0		
	3750	TYKW	45	C	0217.0	0224.1	15.0	3.0	1.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
12	2000	TYKW	45	C	0223.0	0224.0	8.0	2.0	0.5		
	9400	TYKW	5	S	0223.0	0228.0	15.0	5.0	2.5		
	9400	TYKW	5	S	0240.0	0241.0	4.0	6.0	2.0		
	3750	TYKW	28	PRE	0240.0	0252.0	12.0	8.0	3.0		
	2840	PEKG	28	PRE	0242.0		7.0	6.2	3.1		
	1000	TYKW	28	PRE	0243.0	0252.0	9.0	2.0	1.0D		
	2000	TYKW	28	PRE	0243.0	0252.0	9.0	4.0	1.5		
	9400	TYKW	28	PRE	0245.0	0247.0	6.0	4.0	2.0		
	2840	PEKG	47	GB	0249.0	0253.8	24.0	972.0	201.0		
	2902	YUNN	45	C	0250.0	0254.0	25.0	891.0			
	3653	YUNN	45	C	0250.0	0254.0	32.0	926.0			
	2930	VORO	47	GB	0250.0	0254.0	25.0	7532.0			
	9400	TYKW	47	GB	0251.0	0255.1	25.0	1220.0	115.0D		
	2695	LEAR	49	GB	0251.8	0253.8	13.5	770.0			QL=6 ST=2 TYP=7
	8800	LEAR	49	GB	0251.8	0255.0	23.7	1199.0			QL=6 ST=2 TYP=7
	3750	TYKW	47	GB	0252.0	0253.8	25.0	867.0	85.0		
	9395	PEKG	47	GB	0252.0	0253.8	19.0	911.0	189.0U		
	2000	TYKW	47	GB	0252.0	0253.8	18.0	515.0	85.0		
	9395	PEKG			0252.0	0255.1		1065.0			
	1000	TYKW			0252.0	0255.2		312.0			
	1000	TYKW	45	C	0252.0	0256.5	23.0	331.0	65.0		
	4995	LEAR	49	GB	0252.5	0253.8	16.6	770.0			QL=6 ST=2 TYP=7
	4995	PALE	49	GB	0252.6	0253.8	12.7	760.0			QL=6 ST=2 TYP=7
	1415	LEAR	49	GB	0252.6	0255.0	12.7	470.0			QL=6 ST=2 TYP=7
	1415	PALE	49	GB	0252.6	0255.0	12.0	430.0			QL=6 ST=2 TYP=7
	100	HIRA	48	C	0252.7		13.0	10000.0D	3800.0D		
	15400	LEAR	49	GB	0252.8	0253.6	21.3	900.0			QL=6 ST=2 TYP=7
	8800	PALE	49	GB	0252.8	0253.8	15.5	1100.0			QL=6 ST=2 TYP=7
	15400	PALE	49	GB	0252.8	0253.8	15.0	1000.0			QL=6 ST=2 TYP=7
	17000	NOBE	46	C	0252.8	0253.8	5.1	782.0			R
	500	HIRA	48	C	0252.8	0254.5	20.0	13000.0	300.0		WL
	410	LEAR	49	GB	0252.8	0254.6	10.0	10000.0			QL=6 ST=2 TYP=7
	610	LEAR	49	GB	0252.8	0254.8	14.3	370.0			QL=6 ST=2 TYP=7
	200	HIRA	48	C	0252.8	0255.5	7.7	23000.0	3580.0		0
	208	VORO	48	C	0253.0	0255.0	8.0	400.0D			
	35000	NAGO	5	S	0253.0	0255.0	5.0	213.0			
	410	PALE	49	GB	0253.0	0254.6	7.3	18999.0			QL=6 ST=2 TYP=7
	610	PALE	49	GB	0253.0	0254.8	11.6	370.0			QL=6 ST=2 TYP=7
	245	LEAR	49	GB	0253.0	0255.1	6.0				QL=6 ST=2 TYP=7
	245	PALE	49	GB	0253.3	0255.1	5.7				QL=6 ST=2 TYP=7
	17000	NOBE	29	PBI	0257.9	0257.9	20.0	53.0			R
	35000	NAGO	29	PBI	0258.0	0258.0	14.0	59.0			
	9100	GORK	23	GRF	0300.0E	0306.5	435.0D	58.0			
	100	GORK	46	C	0300.5	0302.0	5.6	1000.0			
	100	GORK			0300.5	0305.3		700.0			
	9100	GORK	1	S	0302.9	0303.8	2.8	16.0	8.0		
	2950	GORK	21	GRF	0304.4E	0312.0	308.0D	11.0			
	2950	GORK	1	S	0306.7	0306.9	.9	6.2	3.0		
	650	GORK	21	GRF	0308.0E	0602.0	370.0D	14.0			
	2000	TYKW	29	PBI	0310.0		35.0	4.0	1.5		
	9395	PEKG	29	PBI	0311.0		8.0	12.0	6.2		
	2840	PEKG	29	PBI	0313.0		10.0	12.3	11.9		
	1000	TYKW	29	PBI	0315.0		90.0	4.0	2.0		
	9400	TYKW	29	PBI	0316.0		30.0	9.0	3.0		
	3750	TYKW	29	PBI	0317.0		15.0	2.0	1.0		
	2000	TYKW	20	GRF	0337.0	0401.0	70.0	3.0	1.0		
	9400	TYKW	21	GRF	0355.0	0415.0	45.0	4.0	2.0		
	9100	GORK	2	S/F	0408.6	0409.8	3.4	13.0			
	6100	KISV	1	S	0408.7	0409.8	3.0	6.0			
	9400	TYKW	45	C	0408.8	0409.2	3.0	9.0	3.0		
	9395	PEKG	45	C	0408.8	0409.3	3.2	16.3	6.5		
	3750	TYKW	32	ABS	0428.0	0440.0	24.0	-2.0	-1.0		
	3750	TYKW	45	C	0455.0	0456.1	6.0	70.0	7.0		
	9400	TYKW	45	C	0455.0	0456.6	6.0	24.0	7.0		
	9395	PEKG	45	C	0455.0E	0456.7	3.4D	23.2	13.7U		
	9100	GORK	2	S/F	0455.2	0456.5	3.0	23.0			
	6100	KISV	4	S/F	0455.2	0456.8	2.0	26.0			
	6100	KISV	29	PBI	0455.2	0457.3	19.0	8.0			
	245	LEAR	47	GB	0455.3	0455.5	2.0	270.0			QL=6 ST=3 TYP=5
	4995	LEAR	4	S/F	0455.3	0456.5	4.7	28.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0455.3	0456.6	4.7	32.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
12	610	LEAR	47	GB	0455.3	0456.8	3.8	189.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	0455.3	0459.1	5.3	280.0			QL=6 ST=2 TYP=5
	650	GORK	4	S/F	0455.4	0456.6	1.9	160.0			
	2000	TYKW	45	C	0455.5	0456.7	2.5	36.0	9.0		
	2695	LEAR	47	GB	0455.6	0456.5	2.5	65.0			QL=6 ST=2 TYP=5
	3100	BERN	45	C	0455.7	0456.5	3.0	118.0			
	2950	GORK	4	S/F	0455.7	0456.6	2.6	70.0			
	5200	BERN	4	S/F	0455.7	0456.6	3.0	45.0			
	8400	BERN	4	S/F	0455.7	0456.6	3.0	75.0			
	1000	TYKW	45	C	0455.7	0456.7	3.5	39.0	4.0		
	950	GORK	4	S/F	0455.7	0456.7	2.6	47.0			
	4995	ATHN	4	S/F	0455.8	0456.6	5.0	31.0			QL=6 ST=2 TYP=3
	2695	ATHN	47	GB	0455.8	0456.8	2.5	57.0			QL=6 ST=2 TYP=5
	1415	LEAR	8	S	0455.8	0456.8	1.5	40.0			QL=6 ST=2 TYP=3
	1415	ATHN	4	S/F	0455.8	0456.8	2.5	33.0			QL=6 ST=2 TYP=3
	2902	YUNN	5	S	0456.0	0456.5	2.3	74.0			
	2840	PEKG	3	S	0456.0E	0456.7	3.0D	33.0	18.3		
	8800	ATHN	4	S/F	0456.0	0456.6	4.1	22.0			QL=6 ST=2 TYP=3
	650	GORK	8	S	0457.9	0458.1	.5	34.0			
	2000	TYKW	29	PBI	0458.0		15.0	1.5	0.7		
	650	GORK	8	S	0459.0	0459.2	.3	18.0			
	9400	TYKW	30	PBI	0501.0		35.0	4.0	2.0		
	650	GORK	1	S	0502.5	0502.7	.3	5.0	2.0		
	9400	TYKW	5	S	0508.0	0511.0	7.0	3.0	1.5		
	9400	TYKW	5	S	0525.5	0525.8	1.5	3.0	1.0		
	6100	KISV	2	S/F	0536.0	0537.0	2.0	10.0			
	6100	KISV	29	PBI	0538.0	0538.4	5.0	5.0			
	9400	TYKW	21	GRF	0548.0	0602.0	150.0	6.0	3.0		
	2000	TYKW	20	GRF	0549.0	0550.5	40.0	3.0	1.0		
	3750	TYKW	21	GRF	0549.0	0611.0	140.0	4.0	2.0		
	9400	TYKW	5	S	0610.5	0610.8	1.5	10.0	2.0		
	536	ONDR	41	F	0623.0	0625.0	4.0	38.0			
	9400	TYKW	45	C	0627.0	0637.0	20.0	30.0	9.0		
	1415	ATHN	20	GRF	0630.6	0638.6	17.2	7.0			QL=6 ST=2 TYP=2
	2840	PEKG	45	C	0631.0	0637.0	15.0	10.7	3.3		
	9395	PEKG	45	C	0631.0	0637.0	13.0	28.5	8.1		
	8800	ATHN	20	GRF	0631.0	0636.8	19.5	30.0			QL=6 ST=2 TYP=2
	4995	ATHN	20	GRF	0631.3	0637.0	20.0	7.0			QL=6 ST=2 TYP=2
	2695	ATHN	20	GRF	0631.8	0637.6	17.8	5.0			QL=6 ST=2 TYP=2
	3750	TYKW	5	S	0636.0	0637.4	6.0	4.0	1.0		
	9100	GORK	1	S	0636.0	0637.0	1.9	20.0			
	9395	PEKG	29	PBI	0644.0		10.0	8.9	3.4		
	9400	TYKW	29	PBI	0647.0		30.0	4.0	2.0		
	430	KRAK			0653.0	1102.5		120.0			
	430	KRAK			0653.0	1232.0		100.0			
	9400	TYKW	5	S	0722.0	0723.1	2.0	11.0	5.0		
	9100	GORK	1	S	0722.7	0723.1	.8	12.0			
	9400	TYKW	29	PBI	0724.0		10.0	3.0	1.5		
	9500	POTS	20	GRF	0835.0	0840.0	15.0	9.0			
	2950	GORK	20	GRF	0835.5	0845.0	45.0	3.2	2.0		
	2950	GORK	20	GRF	1047.0	1051.0	8.2	3.3	2.0		
	2800	OTTA	20	GRF	1105.0	1110.0	35.0	5.8	2.7		
	650	GORK	20	GRF	1144.4	1201.7U	28.2D	4.0			
	100	GORK	8	S	1145.6	1146.3	1.6	240.0D			
	2800	OTTA	23	GRF	1150.0	1405.0	230.0	15.6	6.0		
	9100	GORK	20	GRF	1151.9	1200.0	14.0D	10.0			
	2950	GORK	20	GRF	1152.2	1200.0	13.9D	7.0			
	410	SGMR	8	S	1206.1	1207.1	1.0	30.0			QL=6 ST=2 TYP=3
	610	SGMR	8	S	1206.6	1206.8	.4	18.0			QL=6 ST=2 TYP=3
	536	ONDR	41	F	1217.0	1232.5	17.5	25.0			
	810	KRAK	8	S	1225.6	1225.7	.2	6.0			
	808	ONDR	40	F	1231.0	1242.3	12.0	45.0			
	1470	POTS	23	GRF	1231.5	1234.1	17.0	8.0			
	3000	POTS	23	GRF	1231.5	1242.5	34.0	11.0			
	9500	POTS	20	GRF	1231.5	1246.5	40.0	12.0			
	2800	OTTA	8	S	1231.6	1231.8	.4	4.6	2.3		
	810	KRAK	2	S/F	1233.7	1234.0	.7	12.0	3.0		
	2800	OTTA	45	C	1237.0	1242.0	7.0	8.0	.0		
	6100	KISV	2	S/F	1237.2	1239.0	9.5	7.0			
	4995	SGMR	4	S/F	1237.8	1238.8	5.3	20.0			QL=6 ST=2 TYP=3
	930	BORD	46	C	1238.0	1242.0	5.0	40.0	8.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
12	8800	SGMR	8	S	1238.3	1238.8	.8	23.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1238.5	1240.3	2.0	13.0			QL=6 ST=2 TYP=3
	810	KRAK	7	C	1239.0	1242.0	4.0	18.0	4.0		
	1415	SGMR	8	S	1241.8	1242.0	.3	13.0			QL=6 ST=2 TYP=3
	15400	SGMR	8	S	1244.3	1244.5	.3	20.0			QL=6 ST=2 TYP=3
	234	POTS	42	SER	1312.0	1339.5	43.0	420.0			
	536	ONDR	8	S	1324.5	1324.5	.1	25.0			
	8800	ATHN	20	GRF	1329.6	1340.6	57.4	65.0			QL=6 ST=2 TYP=2
	9500	POTS	20	GRF	1330.0E	1343.0	90.0D	49.0			
	6100	KISV			1332.0	1333.4		9.0			
	6100	KISV	46	C	1332.0	1341.5	24.0D	26.0			
	4995	ATHN	20	GRF	1332.3	1340.6	54.7	32.0			QL=6 ST=2 TYP=2
	2695	ATHN	20	GRF	1332.3	1340.6	54.7	11.0			QL=6 ST=2 TYP=2
	3100	BERN	20	GRF	1332.3	1343.0U	80.0	15.0			ONLY PAPER RE
	8400	BERN	20	GRF	1332.3	1343.0U	80.0	35.0			ONLY PAPER RE
	1415	ATHN	20	GRF	1333.6	1341.6	11.7	10.0			QL=6 ST=2 TYP=2
	3000	POTS	21	GRF	1335.0	1402.0U	86.0	17.0U			
	6100	KISV			1336.2			16.0			
	8800	SGMR	20	GRF	1338.3	1342.0	17.5	40.0			QL=6 ST=2 TYP=2
	4995	SGMR	4	S/F	1339.1	1342.3	38.9	25.0			QL=6 ST=2 TYP=3
	15400	SGMR	4	S/F	1339.3	1341.5	5.7	34.0			QL=6 ST=2 TYP=3
	2695	SGMR	4	S/F	1349.5	1351.5	2.1	16.0			QL=6 ST=2 TYP=3
	1415	ATHN	20	GRF	1402.6	1408.5	24.4	13.0			QL=6 ST=2 TYP=2
	2695	PENT	1	S	1416.0	1416.5	1.5	2.4	1.2		
	2800	OTTA	1	S	1418.5	1418.6	2.5	5.0	2.7		
	3000	POTS	3	S	1418.5	1419.0	1.5	17.0			
	1470	POTS	28	PRE	1418.5	1419.1	3.5	6.0			
	610	SGMR	47	GB	1418.6	1418.6	.2	70.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	1418.6	1418.8	.7	219.0			QL=6 ST=2 TYP=5
	410	SGMR	49	GB	1508.3	1508.5	.7	1500.0			QL=6 ST=2 TYP=6
	610	SGMR	47	GB	1508.3	1508.5	.5	90.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1520.0	1520.1	.5	160.0			QL=6 ST=2 TYP=5
	410	SGMR	8	S	1520.1	1520.3	.4	30.0			QL=6 ST=2 TYP=3
	2800	OTTA	21	GRF	1605.0	1625.0	85.0	3.4	1.9		
	8800	ATHN	8	S	1619.6	1620.1	1.5	18.0			QL=6 ST=2 TYP=3
	2800	OTTA	2	S/F	1619.9	1620.0	1.0	3.2	1.6		
	2800	OTTA	3	S	1637.0	1638.0	7.0	27.0	5.4		
	3100	BERN	45	C	1637.0	1638.0	7.0	32.0			ONLY PAPER RE
	4995	ATHN	4	S/F	1637.3	1638.1	4.0	23.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	1637.3	1638.1	3.5	22.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	1637.5	1638.1	4.3	21.0			QL=6 ST=2 TYP=3
	4995	PALE	8	S	1637.8	1638.0	.5	32.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	1637.8	1638.0	1.3	30.0			QL=6 ST=2 TYP=3
	1415	PALE	8	S	1638.1	1638.3	.2	13.0			QL=6 ST=2 TYP=3
	15400	PALE	8	S	1638.6	1638.8	.2	36.0			QL=6 ST=2 TYP=3
	610	SGMR	47	GB	1640.0	1640.3	.8	59.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	1640.1	1640.1	.5	53.0			QL=6 ST=2 TYP=5
	410	PALE	49	GB	1640.3	1640.3	.5	2100.0			QL=6 ST=2 TYP=6
	410	SGMR	49	GB	1640.3	1640.3	.5	2100.0			QL=6 ST=2 TYP=6
	1415	ATHN	8	S	1640.3	1640.6	1.2	10.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1720.5	1721.1	1.5	34.0			QL=6 ST=2 TYP=3
	4995	SGMR	4	S/F	1720.5	1721.1		17.0			QL=6 ST=2 TYP=3
	15400	SGMR	8	S	1720.6	1721.1	1.2	26.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	1721.0	1721.1	.3	26.0			QL=6 ST=2 TYP=3
	610	PALE	47	GB	1736.1	1736.8	2.5	169.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1736.6	1736.8	2.9	180.0			QL=6 ST=2 TYP=5
	2800	OTTA	32	ABS	1800.0	1820.0	50.0	-3.2	-2.2		
	410	SGMR	8	S	1941.3	1941.3	.8	40.0			QL=6 ST=2 TYP=3
	410	PALE	47	GB	1941.6	1941.8	.5	67.0			QL=6 ST=2 TYP=5
	2800	OTTA	20	GRF	2032.0	2035.0	25.0	3.2	1.6		
	2800	OTTA	260	FAL	2100.0	2130.0	30.0	-6.2	-3.1		
	2800	OTTA	22	GRF	2135.0	2225.0	85.0	6.2	2.0		
	9400	TYKW	21	GRF	2155.0	2215.0	70.0	4.0	2.0		
	2000	TYKW	20	GRF	2200.0	2225.0	60.0	2.0	1.0		
	9400	TYKW	5	S	2218.0	2221.5	14.0	6.0	2.0		
	15400	LEAR	8	S	2329.1	2329.1	.2	16.0			QL=6 ST=2 TYP=3
	2930	VORO	42	SER	2335.0	2338.0	55.0	36.0			
	2000	TYKW	20	GRF	2345.0	0020.0	110.0	2.0	1.0		
13	100	GORK	44	NS	0300.0E		540.0D		20.0		
	260	ONDR	44	NS	0544.0E		506.0D	50.0D			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
13	29	UPIC	43	NS	0548.5		731.5D				
	33	UPIC	43	NS	0548.5		731.5D				
	204	IZMI	44	NS	0600.0E		360.0D	100.0			
	430	KRAK	44	NS	0700.0E	0806.0	104.0D	84.0	7.0		
	127	TORN	43	NS	0707.0		403.0		11.0		V=1
	430	KRAK	44	NS	0920.0E	0955.4	220.0D	77.0	9.0		
	245	SGMR	43	NS	0946.0	1752.1	830.0D	440.0			QL=6 ST=2 TYP=1
	410	SGMR	43	NS	1204.8	1831.6	691.2D	62.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1639.0	1911.1	707.0D	290.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	1933.0E	0807.0	835.0D	170.0	2.0		ML
	208	VORO	44	NS	2100.0E		360.0D		16.0		
	410	LEAR	43	NS	2305.0	0353.8	630.0D	26.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	2305.0	0802.1	630.0D	320.0			QL=5 ST=3 TYP=1
	3750	TYKW	20	GRF	0005.0E	0018.0	80.0D	5.0	3.0D		
	2695	PENT	8	S	0036.2	0036.5	.8	1.8	0.9		
	9400	TYKW	20	GRF	0040.0	0054.0	35.0	4.0	2.0		
	9400	TYKW	20	GRF	0135.0	0200.0	50.0	3.0	1.5		
	3750	TYKW	5	S	0140.0	0140.6	1.5	2.0	0.7		
	9400	TYKW	20	GRF	0230.0	0255.0	100.0	4.0	2.0		
	100	GORK	8	S	0357.0	0357.5U	1.5	20.0D			
	3750	TYKW	21	GRF	0413.0	0453.0	115.0	6.0	2.0		
	9400	TYKW	21	GRF	0430.0	0505.0	90.0	6.0	3.0		
	2000	TYKW	20	GRF	0440.0	0453.0	90.0	2.0	1.0		
	3750	TYKW	5	S	0445.0	0445.6	2.0	2.0	0.7		
	9400	TYKW	5	S	0542.0	0543.2	9.0	6.0	1.5		
	650	GORK	21	GRF	0606.0E	0930.7	355.0D	10.0			
	9400	TYKW	28	PRE	0614.0	0616.5	17.0	6.0	3.0		
	3750	TYKW	45	C	0614.0	0636.0	35.0	16.0	4.0		
	2840	PEKG	5	S	0618.0	0636.0	30.0	19.0	3.3		
	2000	TYKW	21	GRF	0620.0	0640.0	50.0	3.0	1.5		
	2000	TYKW	5	S	0625.0	0627.0	8.0	2.0	1.0		
	9395	PEKG	3	S	0625.0	0636.1	22.0	32.8	5.6		
	1000	TYKW	45	C	0631.0	0635.8	6.0	30.0	1.5		INTERFERENCE
	9400	TYKW	45	C	0631.0	0636.0	19.0	37.0	8.0		
	6100	KISV	2	S/F	0631.0	0636.2	6.0	8.0			
	2695	ATHN	4	S/F	0633.8	0635.8	3.2	17.0			QL=6 ST=2 TYP=3
	1415	ATHN	4	S/F	0633.8	0635.8	3.2	13.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	0633.8	0635.8	3.2	19.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	0633.8	0635.8	3.2	27.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0634.1	0636.0	6.0	35.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0634.8	0636.0	3.0	18.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0635.0	0636.0	2.0	13.0	1.5		
	1415	LEAR	8	S	0635.1	0636.0	1.0	20.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0635.3	0636.0	.8	13.0			QL=6 ST=2 TYP=3
	6100	KISV	29	PBI	0637.0	0637.5	10.0	6.0			
	3750	TYKW	29	PBI	0649.0		20.0	3.0	1.5		
	9400	TYKW	30	PBI	0650.0		50.0	4.0	2.0		
	9400	TYKW	5	S	0652.0	0652.4	1.0	4.0	1.5		
	100	GORK	4	S/F	0707.0	0707.7	4.4	20.0D			
	6100	KISV	22	GRF	0712.0	0718.4	20.0	6.0			
	234	POTS	42	SER	0717.4	0717.6	8.1	275.0	1.0		
	234	POTS	4	S/F	0809.2	0809.4	.1	200.0	40.0		
	4995	ATHN	4	S/F	0814.1	0816.3	4.2	10.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	0814.1	0816.3	4.2	15.0			QL=6 ST=2 TYP=3
	6100	KISV	1	S	0815.3	0816.2	2.0	4.0			
	430	KRAK			0920.0	1106.5		90.0			
	430	KRAK			0920.0	1143.7		127.0			
	430	KRAK			0920.0	1222.8		96.0			
	810	KRAK	8	S	0955.0	0955.3	.7	31.0			
	808	ONDR	46	C	1021.0	1022.5	3.0	70.0			
	950	GORK	4	S/F	1021.4	1022.6	2.5	26.0			
	6100	KISV			1021.5	1022.2		16.0			
	1470	POTS	4	S/F	1021.5	1022.5	3.5	14.0			
	810	KRAK	2	S/F	1021.5	1022.5	1.5	13.0	3.0		
	6100	KISV			1021.5	1022.6		23.0			
	9500	POTS	4	S/F	1021.5	1023.0	3.0	32.0			
	6100	KISV	46	C	1021.5	1023.2	5.0	33.0			
	11800	BERN	45	C	1021.7	1023.1	5.5	36.0			
	8400	BERN	45	C	1021.7	1023.1	5.5	57.0			
	5200	BERN	4	S/F	1021.7	1023.1	5.5	41.0			
	3100	BERN	4	S/F	1021.7	1023.1	5.5	30.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
13	8800	SGMR	47	GB	1021.8	1023.1	2.2	53.0			QL=6 ST=2 TYP=5
	2650	DWIN	1	S	1022.0	1022.0	2.0	30.0	10.0		
	3000	POTS	4	S/F	1022.0	1023.2	3.0	20.0			
	3100	CRIM	1	S	1022.0	1023.0	3.0	20.0	7.0		
	2950	GORK	4	S/F	1022.0	1023.1	3.7	20.0			
	15400	SGMR	8	S	1022.0	1023.1	1.1	28.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1022.0	1023.1	1.3	34.0			QL=6 ST=2 TYP=3
	1415	SGMR	8	S	1022.1	1022.3	1.0	20.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1022.1	1022.5	1.2	19.0			QL=6 ST=2 TYP=3
	6100	KISV	29	PBI	1026.5	1026.5	8.0	3.0			
	536	ONDR	41	F	1102.5	1109.5	11.0	11.0			
	2800	OTTA	21	GRF	1105.0	1110.0	17.0	2.2	1.1		
	808	ONDR	40	F	1105.0	1109.5	14.0	17.0			
	6100	KISV	21	GRF	1105.1	1109.9	23.5	8.0			
	650	GORK	40	F	1106.0	1109.4	7.2	47.0			
	810	KRAK	42	SER	1106.5	1109.8	7.0	13.0			
	234	POTS	4	S/F	1110.6	1110.7	.6	240.0	40.0		
	2800	OTTA	8	S	1110.7	1110.8	.7	2.2	1.1		
	2800	OTTA	1	S	1134.0	1135.0	2.5	2.6	1.3		
	6100	KISV	1	S	1134.1	1135.3	4.0	3.0			
	410	SGMR	8	S	1154.5	1154.6	.3	20.0			QL=6 ST=2 TYP=3
	2800	OTTA	27A	RF	1210.0		350.0	3.2	3.0		
	2800	OTTA	24	R	1210.0	1225.0	15.0	3.2	1.6		
	2800	OTTA	24P	R	1225.0		305.0	3.2			
	2800	OTTA	20	GRF	1230.0	1232.0	25.0	3.2	1.7		
	810	KRAK	8	S	1239.5	1239.5	.5	35.0			
	234	POTS	41	F	1248.5	1248.5	.9	275.0	15.0		
	3000	POTS	20	GRF	1410.0E	1428.0	40.0D	18.0			
	2800	OTTA	20	GRF	1415.0	1440.0	60.0	5.0	2.5		
	9500	POTS	20	GRF	1417.5E	1422.0	33.0D	21.0			
	8800	ATHN	20	GRF	1417.6	1427.6	20.4	30.0			QL=6 ST=2 TYP=2
	4995	ATHN	20	GRF	1417.6	1428.5	20.4	22.0			QL=6 ST=2 TYP=2
	2695	ATHN	20	GRF	1421.8	1427.6	16.2	13.0			QL=6 ST=2 TYP=2
	234	POTS	4	S/F	1422.9	1423.0	.3	330.0	75.0		
	2800	OTTA	26	FAL	1730.0	1800.0	30.0	-3.2	-1.6		
	245	PALE	47	GB	1831.5	1831.6	.5	280.0			QL=6 ST=2 TYP=5
	2800	OTTA	240	R	1905.0	1920.0	15.0	2.2	1.1		
	2800	OTTA	21	GRF	1925.0	1950.0	195.0	5.8	2.5		
	2800	OTTA	1	S	1946.0	1946.5	2.0	2.2	1.1		
	9400	TYKW	5	S	2254.5	2255.8	3.5	5.0	2.0		
	3750	TYKW	20	GRF	2330.0	0010.0	115.0	4.0	2.0		
	1000	TYKW	45	C	2339.4	2339.9	1.5	8.0	1.5		
	410	LEAR	8	S	2339.6	2339.8	.4	45.0			QL=6 ST=2 TYP=3
	9400	TYKW	21	GRF	2345.0	0015.0	110.0	4.0	2.0		
	2695	PENT	20	GRF	2350.0	0010.0	55.0	3.0	1.5		
	2000	TYKW	20	GRF	2350.0	0013.0	50.0	2.0	1.0		
14	410	LEAR	43	NS	0115.3	0523.3	499.7D	61.0			QL=6 ST=2 TYP=1
	100	GORK	44	NS	0300.0E		120.0D		5.0		
	260	ONDR	44	NS	0550.0E		504.0D	175.0			
	204	IZMI	44	NS	0600.0E		360.0D	50.0			
	100	HIRA	43	NS	0617.0	0855.0U	158.0D	500.0U	140.0U		
	100	GORK	43	NS	0700.0		171.0D		100.0		
	33	UPIC	43	NS	0723.5		636.5D				
	29	UPIC	43	NS	0723.7		636.3D				
	245	SGMR	43	NS	0945.0	1225.6	735.0	910.0			QL=6 ST=3 TYP=1
	245	PALE	44	NS	1634.0E	1712.6		110.0			QL=6 ST=3 TYP=1
	200	HIRA	44	NS	1932.0E	2055.0	570.0D	30.0	10.0		WR
	208	VORO	44	NS	2100.0E		360.0D		7.0		
	245	LEAR	43	NS	2306.0	2311.8	628.0D	88.0			QL=6 ST=2 TYP=1
	410	LEAR	43	NS	2334.0	2339.1	101.0	11.0			QL=6 ST=2 TYP=1
	9400	TYKW	20	GRF	0050.0	0055.0	30.0	3.0	1.5		
	2000	TYKW	20	GRF	0058.0	0100.0	35.0	2.0	1.0		
	3750	TYKW	20	GRF	0152.0	0201.0	35.0	2.0	1.0		
	2000	TYKW	20	GRF	0155.0	0205.0	30.0	1.5	0.7		
	9100	GORK	21	GRF	0256.0E	0837.8	410.0D	21.0			
	9400	TYKW	5	S	0312.0	0313.0	3.0	3.0	1.0		
	3750	TYKW	21	GRF	0320.0	0405.0	130.0	5.0	2.0		
	2000	TYKW	21	GRF	0320.0	0410.0	170.0	4.0	2.0		
	9400	TYKW	28	PRE	0330.0	0357.0	27.0	6.0	3.0		
	1000	TYKW	21	GRF	0340.0	0425.0	150.0	2.0	1.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
14	3750	TYKW	5	S	0347.0	0348.3	4.0	4.0	1.5		
	9400	TYKW	5	S	0347.0	0348.6	7.0	13.0	4.0		
	4995	LEAR	4	S/F	0347.6	0348.5	3.4	10.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0348.1	0348.8	1.5	13.0	6.0		
	9400	TYKW	45	C	0357.0	0414.3	25.0	22.0	12.0		
	650	GORK	21	GRF	0403.0	0726.8	264.0	16.0			
	4995	LEAR	20	GRF	0404.0	0414.0	26.0	10.0			QL=6 ST=2 TYP=2
	8800	LEAR	20	GRF	0404.0	0416.0	26.0	15.0			QL=6 ST=3 TYP=2
	8800	LEAR	20	GRF	0411.1	0411.3	.4	16.0			QL=6 ST=2 TYP=2
	4995	ATHN	20	GRF	0412.6	0414.8	17.4	5.0			QL=6 ST=2 TYP=2
	2695	ATHN	20	GRF	0412.6	0418.3	17.4	8.0			QL=6 ST=2 TYP=2
	8800	ATHN	20	GRF	0412.6	0418.5	17.4	25.0			QL=6 ST=2 TYP=2
	3750	TYKW	5	S	0413.0	0414.0	4.0	3.0	1.0		
	6100	KISV	1	S	0413.0	0414.1	6.0	7.0			
	9100	GORK	1	S	0413.4	0414.2	1.7	11.0	5.0		
	9400	TYKW	29	PBI	0422.0		60.0	12.0	5.0		
	950	GORK	23	GRF	0439.0	0712.0	312.0D	16.5			
	8800	ATHN	4	S/F	0440.1	0440.6	3.2	29.0			QL=6 ST=2 TYP=3
	3750	TYKW	20	GRF	0445.0	0455.0	40.0	2.0	1.0		
	2000	TYKW	5	S	0448.0	0449.8	3.0	4.0	2.0		
	650	GORK	4	S/F	0448.4	0449.7	1.9	46.0			
	500	HIRA	42	SER	0448.4	0514.4	27.0	90.0			ML
	650	GORK	1	S	0448.5	0448.9	1.5	3.0			
	610	LEAR	47	GB	0448.5	0449.6	1.3	69.0			QL=6 ST=2 TYP=5
	2950	GORK	20	GRF	0448.5	0449.8	13.2	3.1			
	2000	TYKW	30	PBI	0451.0		20.0	2.0	1.0		
	1415	ATHN	4	S/F	0459.6	0501.5	5.7	13.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0501.0	0501.5	1.0	4.0	1.5		
	1000	TYKW	5	S	0501.0	0501.5	1.0	12.0	4.0		
	950	GORK	2	S/F	0501.0	0501.5	.8	11.0			
	610	LEAR	47	GB	0501.0	0501.6	1.5	66.0			QL=6 ST=2 TYP=5
	650	GORK	4	S/F	0501.1U	0501.6	.8U	37.0			
	1415	LEAR	8	S	0501.1	0501.6	.7	8.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	0550.0	0556.0	12.0	3.0	1.5		
	9400	TYKW	5	S	0619.0	0628.0	22.0	6.0	2.0		
	1000	TYKW			0640.0	0720.7		18.0			
	2000	TYKW	21	GRF	0640.0	0721.0	140.0U	10.0	5.0		
	1000	TYKW	45	C	0640.0	0738.3	70.0	23.0	6.0		
	9400	TYKW	5	S	0646.0	0647.1	5.0	4.0	1.0		
	3750	TYKW	21	GRF	0652.0	0755.0	135.0D	14.0	8.0D		
	500	HIRA	22	GRF	0654.3	0728.0	90.0	15.0	6.0		SL
	6100	KISV	28	PRE	0655.0	0731.0	36.0	10.0			
	2695	ATHN	4	S/F	0656.3	0701.5	6.7	11.0			QL=6 ST=2 TYP=3
	1415	LEAR	20	GRF	0657.5	0757.6	74.5	56.0			QL=5 ST=2 TYP=2
	808	ONDR	42	SER	0700.0	0738.0	40.0	30.0			
	536	ONDR	40	F	0700.0	0815.0	90.0	7.0			
	2695	LEAR	20	GRF	0700.5	0728.1	71.5	11.0			QL=5 ST=2 TYP=2
	245	LEAR	20	GRF	0700.5E	0805.0	84.5D	75.0			QL=5 ST=2 TYP=2
	410	LEAR	20	GRF	0701.3	0726.8	70.7	29.0			QL=5 ST=2 TYP=2
	610	LEAR	20	GRF	0702.0	0711.6	38.0	15.0			QL=6 ST=2 TYP=2
	4995	LEAR	20	GRF	0702.0	0744.1	70.0	11.0			QL=5 ST=2 TYP=2
	9400	TYKW	5	S	0705.7	0706.2	2.0	2.0	1.0		
	810	KRAK	27	RF	0708.0U	0711.5	20.0U	12.0	2.0		
	3000	POTS	20	GRF	0715.0U	0720.5	150.0U	11.0			
	430	KRAK	27	RF	0721.5	0728.0	25.0	32.0	12.0		
	1470	POTS	45	C	0725.0	0757.5	130.0	40.0			
	100	HIRA	45	C	0726.4	0727.0	1.2	940.0	230.0		
	1415	ATHN	4	S/F	0726.5	0726.6	2.8	13.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0726.5	0726.7	0.5	8.0	1.5		
	113	POTS	4	S/F	0726.7	0727.0	.9	700.0	150.0		III
	9400	TYKW	5	S	0729.0	0731.6	4.0	98.0	18.0		
	204	IZMI	42	SER	0730.0		60.0	600.0			
	19600	BERN	3	S	0730.3	0731.5	15.0	42.0			
	5200	BERN	3	S	0730.3	0731.5	15.0	46.0			
	8400	BERN	3	S	0730.3	0731.5	15.0	105.0			
	11800	BERN	3	S	0730.3	0731.5	15.0	91.0			
	8800	ATHN	47	GB	0730.6	0731.5	3.5	72.0			QL=6 ST=2 TYP=5
	3750	TYKW	5	S	0731.0	0731.6	2.0	9.0	2.5		
	4995	LEAR	8	S	0731.0	0731.5	1.1	42.0			QL=6 ST=2 TYP=3
	9100	GORK	4	S/F	0731.0	0731.5	2.0	92.0			
	8800	LEAR	47	GB	0731.0	0731.5	1.8	100.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
14	6100	KISV	8	S	0731.0	0731.5	1.0	60.0			
	9500	POTS	4	S/F	0731.0	0731.6	3.0	88.0			
	4995	ATHN	8	S	0731.1	0731.5	1.7	28.0			QL=6 ST=2 TYP=3
	15400	LEAR	47	GB	0731.1	0731.5	.9	68.0			QL=6 ST=2 TYP=5
	17000	NOBE	1	S	0731.1	0731.6	1.7	56.0			R
	9400	TYKW	30	PBI	0733.0		67.0D	11.0	7.0D		
	2000	TYKW	45	C	0736.0	0743.6	10.0	3.0	1.5		
	1415	ATHN	20	GRF	0737.6	0742.1	10.7	36.0			QL=6 ST=2 TYP=2
	810	KRAK	2	S/F	0738.0	0738.0	1.0	22.0	3.0		
	810	KRAK	8	S	0744.5	0744.5	.5	6.0			
	2000	TYKW	30	PBI	0746.0		50.0	2.0	1.0		
	1000	TYKW	30	PBI	0750.0		60.0	5.0	2.5		
	430	KRAK	42	SER	0753.0E	0835.2	307.0D	46.0			
	430	KRAK			0753.0E	0857.5		49.0			
	430	KRAK			0753.0E	0956.5		330.0			
	430	KRAK			0753.0E	1243.3		250.0			
	2000	TYKW	45	C	0754.0	0757.7	6.0	6.0	2.0		
	2000	TYKW	45	C	0800.0	0805.7	12.0	18.0	6.0		
	1000	TYKW	5	S	0800.0	0805.7	12.0	4.0	1.0		
	234	POTS	41	F	0801.3	0802.1	7.7	770.0	25.0		III
	2000	TYKW	5	S	0813.0	0813.6	2.0	3.0	1.0		
	2000	TYKW	5	S	0818.5	0818.7	0.7	3.0	1.0		
	9400	TYKW	5	S	0834.0	0836.7	4.0	29.0	10.0		
	6100	KISV	3	S	0834.9	0836.9	4.0	16.0			
	3750	TYKW	45	C	0835.5	0836.8	4.0	9.0	3.0		
	9500	POTS	25	R	0835.5	0836.8	25.0	27.0			
	4995	LEAR	8	S	0835.6	0836.8	1.9	17.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0835.6	0836.8	1.9	18.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0835.6	0836.8	1.9	24.0			QL=6 ST=2 TYP=3
	9100	GORK	3	S	0835.7	0836.9	2.1	23.0	11.0		
	9400	TYKW	29	PBI	0838.0		2.0D	8.0	7.0D		
	8800	LEAR	8	S	0848.8	0849.8	1.7	17.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	0848.8	0849.8	1.7	13.0			QL=6 ST=2 TYP=3
	6100	KISV	1	S	0849.1	0849.8	5.0	8.0			
	9100	GORK	1	S	0849.3	0849.7	1.3	9.4	5.0		
	810	KRAK	41	F	0850.3	0852.5	53.5	12.0	3.0		
	204	IZMI	5	S	0951.2	0951.3	.2	1230.0	1000.0		
	810	KRAK	4	S/F	0955.7	0955.8	4.3	200.0	4.0		
	234	POTS	4	S/F	0955.7	0955.8	.8	42000.0	1000.0		III
	3000	POTS	4	S/F	0955.7	0956.0	3.3	75.0			
	1470	POTS	4	S/F	0955.7	0956.2	9.3	73.0			
	11800	BERN	4	S/F	0955.8	0956.1	6.0	67.0			
	19600	BERN	3	S	0955.8	0956.1	6.0	36.0			
	5200	BERN	4	S/F	0955.8	0956.1	6.0	93.0			
	3100	BERN	4	S/F	0955.8	0956.1	6.0	104.0			
	8400	BERN	4	S/F	0955.8	0956.1	6.0	91.0			
	6100	KISV	4	S/F	0955.8	0956.8	2.0	23.0			
	2650	DWIN	3	S	0956.0	0956.0	2.0	70.0	30.0		
	536	ONDR	4	S/F	0956.0	0956.0	2.0	37.0			
	3000	IZMI	5	S	0956.0	0956.1	2.6	46.0	20.0		
	9500	POTS	4	S/F	0956.0	0956.3	2.0	64.0			
	113	POTS	4	S/F	0956.1	0956.1	.5	2800.0	300.0		III
	808	ONDR	46	C	0957.0	0957.0	1.0U	82.0			
	204	IZMI	42	SER	1011.0		15.0	300.0			
	810	KRAK	1	S	1043.2	1043.5	1.3	8.0	3.0		
	234	POTS	4	S/F	1117.7	1117.8	.1	180.0	20.0		
	2800	OTTA	1	S	1143.0	1143.3	1.0	3.2	1.8		
	3000	POTS	1	S	1143.0	1143.5	1.0	4.0			
	536	ONDR	4	S/F	1143.0	1143.5	2.0	95.0			
	1470	POTS	4	S/F	1143.0	1144.0	1.5	38.0			
	410	SGMR	47	GB	1143.1	1143.1	.7	87.0			QL=6 ST=2 TYP=5
	610	SGMR	8	S	1143.3	1143.3	.5	31.0			QL=6 ST=2 TYP=3
	1415	SGMR	8	S	1143.3	1143.8	.8	38.0			QL=6 ST=2 TYP=3
	2800	OTTA	32	ABS	1155.0	1230.0	70.0	-2.6	-1.3		
	9500	POTS	20	GRF	1404.0	1412.0	21.0	9.0			
	9400	HUAN	20	GRF	1404.7	1413.5	13.8	5.2	1.9		R
	2800	OTTA	21	GRF	1525.0	1615.0	155.0	6.2	3.1		
	9400	HUAN	1	S	1542.2	1543.7	6.0	11.7	5.6		R
	2695	SGMR	8	S	1559.8	1601.3	1.7	13.0			QL=6 ST=2 TYP=3
	2800	OTTA	2	S/F	1605.0	1609.0	6.0	4.0	2.2		
	2695	ATHN	4	S/F	1605.1	1608.8	6.9	7.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
14	9400	HUAN	4	S/F	1605.3	1607.9	5.9	19.5	9.0		R
	3100	BERN	3	S	1605.5	1607.7	15.0	9.0			ONLY PAPER RE
	8400	BERN	3	S	1605.5	1607.7	15.0	34.0			ONLY PAPER RE
	5200	BERN	4	S/F	1605.5	1607.7	15.0	47.0			ONLY PAPER RE
	4995	ATHN	4	S/F	1605.8	1607.6	6.3	29.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	1606.3	1607.6	5.8	22.0			QL=6 ST=2 TYP=3
	4995	SGMR	4	S/F	1606.5	1607.8	3.5	37.0			QL=6 ST=2 TYP=3
	610	SGMR	8	S	1606.6	1607.5	1.0	24.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1606.6	1607.8	1.7	31.0			QL=6 ST=2 TYP=3
	15400	SGMR	8	S	1606.8	1607.8	1.2	23.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	1607.3	1607.5	.5	169.0			QL=6 ST=2 TYP=5
	610	SGMR	4	S/F	1612.8	1614.3	3.7	27.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1613.5	1613.6	.3	18.0			QL=6 ST=2 TYP=3
	410	PALE	47	GB	1712.3	1712.6	.5	230.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	1712.3	1712.6	.5	239.0			QL=6 ST=2 TYP=5
	2800	OTTA	21	GRF	1915.0	1923.0	45.0	2.6	1.3		
	2800	OTTA	1	S	1943.0	1943.5	1.5	3.8	.9		
	410	PALE	8	S	2052.3	2052.3	.3	20.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	2105.3	2105.8	.8	40.0			QL=6 ST=2 TYP=3
	410	PALE	47	GB	2105.6	2105.8	.4	130.0			QL=6 ST=2 TYP=5
	2800	OTTA	23	GRF	2140.0	2210.0	160.0	4.2	1.9		
	2000	TYKW	20	GRF	2150.0	2210.0	50.0	3.0	1.5		
	2000	TYKW	21	GRF	2252.0	2320.0	80.0	2.0	1.0		
	3750	TYKW	21	GRF	2300.0	2320.0	70.0	4.0	2.0		
	9400	TYKW	20	GRF	2300.0	2325.0	70.0	4.0	2.0		
	3750	TYKW	45	C	2310.0	2314.0	6.0	6.0	2.0		
	2000	TYKW	45	C	2310.0	2314.0	5.0	5.0	1.0		
	500	HIRA	45	C	2312.7	2313.7	1.7	70.0	20.0		ML
	1000	TYKW	45	C	2313.0	2314.2	2.0	27.0	6.0		
	610	LEAR	8	S	2313.1	2314.0	1.9	30.0			QL=6 ST=2 TYP=3
	2695	PENT	1	S	2313.2	2314.0	2.0	3.6	1.5		
	245	LEAR	47	GB	2313.3	2313.6	1.3	97.0			QL=6 ST=2 TYP=5
	1415	LEAR	8	S	2313.3	2314.1	1.7	7.0			QL=6 ST=2 TYP=3
	410	PALE	8	S	2313.6	2314.0	.5	29.0			QL=6 ST=2 TYP=3
	245	SGMR	8	S	2313.6	2314.1	1.2	20.0			QL=6 ST=2 TYP=3
	245	PALE	8	S	2313.6	2314.1	.7	30.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	2313.8	2314.0	.3	27.0			QL=6 ST=2 TYP=3
	610	PALE	8	S	2313.8	2314.1	.5	33.0			QL=6 ST=2 TYP=3
15	410	LEAR	43	NS	0236.0	0238.5	418.0D	22.0			QL=6 ST=2 TYP=1
	100	GORK	44	NS	0254.0E		159.0D		10.0		
	100	GORK	43	NS	0940.0		80.0D		130.0		
	245	SGMR	43	NS	1215.3	1219.6		26.0			QL=6 ST=3 TYP=1
	9400	TYKW	5	S	0012.5	0013.3	3.5	15.0	7.0		
	8800	LEAR	8	S	0012.8	0013.3	1.7	13.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0013.1	0013.1	.5	21.0			QL=6 ST=2 TYP=3
	9400	TYKW	30	PBI	0016.0		75.0	4.0	2.0		
	9400	TYKW	5	S	0030.0	0032.4	20.0	8.0	3.0		
	3750	TYKW	5	S	0030.0	0034.0	15.0	1.5	0.5		
	4995	PALE	8	S	0110.3	0110.3	.3	21.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	0110.3	0110.3	.3	26.0			QL=6 ST=2 TYP=3
	1415	PALE	8	S	0110.3	0110.3	.3	15.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	0152.5	0153.0	3.5	27.0	5.0		
	8800	PALE	8	S	0152.8	0153.0	.5	35.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	0152.8	0153.0	.7	9.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0152.8	0153.0	.3	18.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0152.8	0153.0	.5	29.0			QL=6 ST=2 TYP=3
	9395	PEKG	3	S	0152.8	0153.1	2.2	26.1	3.6		
	245	PALE	47	GB	0235.6	0235.6	.4	82.0			QL=6 ST=2 TYP=5
	410	PALE	8	S	0237.1	0237.1	.2	30.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0243.1	0243.1	.2	44.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0243.1	0243.3	.2	13.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	0248.0	0248.4	1.0	5.0	2.0		
	4995	LEAR	8	S	0251.8	0252.6	1.5	17.0			QL=6 ST=2 TYP=3
	9395	PEKG	3	S	0252.0	0252.6	3.0	48.8	16.4		
	9400	TYKW	5	S	0252.0	0252.6	2.0	48.0	12.0		
	8800	LEAR	47	GB	0252.1	0252.6	.9	51.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	0252.3	0252.6	.5	53.0			QL=6 ST=2 TYP=5
	15400	LEAR	8	S	0252.3	0252.6	.5	41.0			QL=6 ST=2 TYP=3
	15400	PALE	47	GB	0252.3	0252.6	.5	69.0			QL=6 ST=2 TYP=5
	17000	NOBE	1	S	0252.3	0252.6	1.0	30.0			R

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
15	245	LEAR	8 S	0252.3	0252.6	.5	29.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0252.3	0252.7	1.5	5.0	1.5		
	4995	PALE	8 S	0252.5	0252.6	.3	16.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0252.6	0252.6	.2	11.0			QL=6 ST=2 TYP=3
	9400	TYKW	29 PBI	0254.0		10.0	4.0	2.0		
	3750	TYKW	20 GRF	0310.0	0322.0	40.0	2.0	1.0		
	9400	TYKW	21 GRF	0330.0U	0355.0U	80.0U	4.0	2.0		RAIN
	100	GORK	46 C	0332.0	0333.3	3.2	140.0			
	100	GORK		0332.0	0333.9		180.0			
	9100	GORK	20 GRF	0341.4	0353.0	17.7	5.5	2.0		
	3750	TYKW	20 GRF	0405.0	0420.0	50.0	2.0	1.0		
	650	GORK	20 GRF	0421.0	0500.0	52.7	7.0	3.0		
	9100	GORK	1 S	0435.5	0435.7	.7	10.0	5.0		
	9100	GORK	1 S	0438.5	0438.7	.6	5.5	3.0		
	245	LEAR	47 GB	0447.1	0447.3	.5	130.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	0447.1	0447.3	.7	18.0			QL=6 ST=2 TYP=3
	9100	GORK	21 GRF	0505.0	0641.8	147.8	28.0	10.0		
	610	LEAR	8 S	0510.1	0510.6	1.0	28.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0510.1	0510.6	.9	19.0			QL=6 ST=2 TYP=3
	9400	TYKW	21 GRF	0530.0U	0640.0U	191.0D	20.0	10.0D		RAIN
	3750	TYKW	20 GRF	0540.0	0621.0U	160.0U	4.0	2.0U		RAIN
	204	IZMI	7 C	0614.5	0615.5	1.0	124.0	60.0		
	650	GORK	41 F	0627.7	0628.3	3.4	17.0			
	650	GORK		0627.7	0630.7		32.0			
	950	GORK	1 S	0628.0	0628.3	4.0	2.0			
	2840	PEKG	20 GRF	0630.0	0634.0	46.0	22.6			
	9395	PEKG	20 GRF	0637.0	0640.6	34.0	20.7	9.6		
	9100	GORK	1 S	0638.3	0638.8	3.4	10.0	5.0		
	15400	LEAR	8 S	0638.5	0638.8		20.0			QL=6 ST=3 TYP=3
	8800	LEAR	8 S	0638.5	0640.8		21.0			QL=6 ST=3 TYP=3
	2000	TYKW	20 GRF	0645.0	0725.0	110.0	4.0	2.0		
	430	KRAK	42 SER	0700.0E	0812.5	90.0D	21.0			
	9400	TYKW	20 GRF	0804.0	0807.0U	30.0	12.0	5.0U		
	9500	POTS	20 GRF	0805.0	0807.2	10.0	16.0			
	9100	GORK	2 S/F	0805.0	0807.0	5.3	12.9			
	9395	PEKG	20 GRF	0810.0	0815.8	20.0	4.9	3.2		
	3653	YUNN	47 GB	0833.0	0919.8	81.0D	3382.0			
	2840	PEKG	47 GB	0837.0	0846.3	33.0D	651.0			
	9395	PEKG	47 GB	0837.0	0846.8	78.0	638.0D			
	9395	PEKG		0837.0	0911.2		740.0			
	9100	GORK	47 GB	0837.8	0846.8	138.0D	1070.0			
	9100	GORK		0837.8	0911.0		1650.0			
	9100	GORK		0837.8	0919.1		2250.0			
	9400	TYKW	45 C	0838.0	0839.7U	3.0D	80.0	35.0D		
	3750	TYKW	47 GB	0838.0	0846.1	21.0	530.0	140.0		
	19600	BERN	47 GB	0839.0	0846.6	200.0U	920.0			
	8400	BERN	47 GB	0839.0	0919.0U	200.0U	2800.0D			
	3100	BERN	47 GB	0839.0	0919.0U	200.0U	2100.0D			
	5200	BERN	47 GB	0839.0	0919.0U	200.0U	2500.0D			
	11800	BERN	47 GB	0839.0	0919.4	200.0U	1698.0			
	4995	LEAR	49 GB	0839.1	0845.8	14.0	570.0			QL=6 ST=2 TYP=7
	8800	LEAR	49 GB	0839.1	0846.0	14.0	990.0			QL=6 ST=2 TYP=7
	2950	GORK	47 GB	0839.2	0846.2	130.0D	450.0			
	2950	GORK		0839.2	0911.2		1740.0			
	2950	GORK		0839.2	0919.7		2800.0			
	15400	LEAR	49 GB	0839.3	0846.0	13.8	1000.0			QL=6 ST=2 TYP=7
	2000	TYKW	45 C	0840.0	0845.8	19.0	465.0	100.0		
	1470	POTS	45 C	0840.0E	0921.5	200.0D	925.0			
	2650	DWIN	49 GB	0841.0		120.0	500.0D			
	1000	TYKW	47 GB	0841.0	0846.3	13.0D	2840.0	430.0D		
	3000	IZMI	46 C	0841.0	0846.0	16.0	466.0	190.0		
	2695	LEAR	49 GB	0841.3	0846.0	11.8	470.0			QL=6 ST=2 TYP=7
	930	BORD	47 GB	0842.0	0846.3	18.0	1860.0	300.0		
	950	GORK	47 GB	0842.0	0847.8	93.0	2890.0			
	930	BORD		0842.0	0847.8		1705.0			
	950	GORK		0842.0	0921.5		983.0			
	1415	LEAR	49 GB	0842.1	0845.8	11.0	2699.0			QL=6 ST=2 TYP=7
	810	KRAK	49 GB	0843.0	0847.5U	149.0	390.0D	100.0		
	810	KRAK		0843.0	0910.0		127.0			
	810	KRAK		0843.0	0926.5		300.0			
	650	GORK	47 GB	0843.3	0846.8	1007.0	180.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
15	650	GORK			0843.3	0919.8		189.0			
	610	LEAR	49	GB	0843.6	0844.6	9.5	160.0			QL=6 ST=2 TYP=7
	536	ONDR	28	PRE	0844.0				50.0		
	536	ONDR			0844.0	0848.0		59.0			
	536	ONDR			0844.0	0910.0		38.0			
	500	HIRA	45	C	0844.6	0849.3	10.0	200.0	30.0		0
	3000	POTS	45	C	0845.0E		210.0D	1150.0			
	9500	POTS	45	C	0845.0E	0919.0	210.0D	1850.0			
	430	KRAK	45	C	0846.0	0910.5	140.0	122.0	33.0		
	430	KRAK			0846.0	0919.0		114.0			
	430	KRAK			0846.0	1000.5		88.0			
	260	ONDR	46	C	0847.0		31.0				
	260	ONDR			0847.0	0848.0		206.0D			
	260	ONDR			0847.0	0910.0		195.0			
	260	ONDR			0847.0	0920.0U		206.0D			
	410	LEAR	49	GB	0847.8	0848.0	5.3	39.0			QL=6 ST=2 TYP=7
	234	POTS	48	C	0848.0	0848.5	42.0	1100.0			III/IV
	113	POTS	48	C	0848.0	0849.5	52.0	5500.0			III/IV
	100	HIRA	48	C	0848.0	0850.7	40.0D	5500.0	230.0U		
	100	HIRA			0848.0	0902.5		850.0U			
	33	UPIC	49	GB	0848.2		21.9				
	100	GORK	46	C	0848.2	0849.9	45.5	121000.0			
	100	GORK			0848.2	0850.5		68000.0			
	100	GORK			0848.2	0903.6		12000.0			
	100	GORK			0848.2	0909.0		80000.0			
	29	UPIC	49	GB	0848.4	0849.8	22.1				
	245	LEAR	49	GB	0848.5	0848.6	4.6	2399.0			QL=6 ST=2 TYP=7
	204	IZMI	5	S	0848.5	0848.6	.5	630.0	300.0		
	204	IZMI	45	C	0848.5	0910.4	95.0	220.0	100.0		
	200	HIRA	48	C	0848.6	0848.8	40.0D	860.0	120.0U		0
	200	HIRA			0848.6	0912.1		260.0U			WL
	410	LEAR	4	S/F	0853.1	0853.3	5.0	39.0			QL=6 ST=2 TYP=3
	610	LEAR	47	GB	0853.1	0853.3	3.0	230.0			QL=6 ST=2 TYP=5
	8800	LEAR	47	GB	0853.1	0853.3	3.7	500.0			QL=6 ST=2 TYP=5
	2695	LEAR	47	GB	0853.1	0853.3	3.9	139.0			QL=6 ST=2 TYP=5
	4995	LEAR	47	GB	0853.1	0853.3	3.7	330.0			QL=6 ST=2 TYP=5
	15400	LEAR	49	GB	0853.1	0907.3	20.5	119.0			QL=6 ST=2 TYP=6
	1415	LEAR	49	GB	0853.1	0912.3	20.5	620.0			QL=6 ST=2 TYP=6
	245	LEAR	47	GB	0854.0	0855.6	19.6	50.0			QL=6 ST=2 TYP=5
	2000	TYKW	30	PBI	0859.0		1.0	10.0	10.0		
	3750	TYKW	47	GB	0859.0	0918.8	20.0D	4350.0	950.0D		
	2000	TYKW	47	GB	0900.0	0911.8	15.0D	1500.0	480.0D		
	930	BORD	29	PBI	0900.0	0921.5	134.0	589.0	13.0		
	3000	IZMI	47	GB	0905.0	0920.0	55.0	2660.0	1300.0		
	33	UPIC	29	PBI	0910.1	0949.4	85.4				
	29	UPIC	29	PBI	0910.5	0946.8	81.5				
	1415	LEAR	49	GB	0913.6	0913.8	9.7	620.0			QL=6 ST=2 TYP=7
	2695	LEAR	49	GB	0913.6	0914.1	9.7	1800.0			QL=6 ST=2 TYP=7
	4995	LEAR	49	GB	0913.6	0914.3	9.7	2000.0			QL=6 ST=2 TYP=7
	8800	LEAR	49	GB	0913.6	0914.3	9.7	1300.0			QL=6 ST=2 TYP=7
	15400	LEAR	49	GB	0913.6	0914.3	9.7	1000.0			QL=6 ST=2 TYP=7
	245	LEAR	49	GB	0913.6	0918.6	9.7	330.0			QL=6 ST=2 TYP=7
	410	LEAR	49	GB	0913.6	0918.8	9.7	60.0			QL=6 ST=2 TYP=7
	610	LEAR	49	GB	0913.6	0918.8	9.7	180.0			QL=6 ST=2 TYP=7
	536	ONDR	46	C	0916.0		64.0				
	536	ONDR			0916.0	0920.0		71.0			
	536	ONDR			0916.0	1001.5		71.0			
	500	HIRA	46	C	0921.0	0924.0	21.0D	100.0	50.0		WR
	15400	LEAR	49	GB	0923.3	0923.3	8.3	2000.0			QL=6 ST=2 TYP=7
	2695	LEAR	49	GB	0923.3	0923.3	8.3	4000.0			QL=6 ST=2 TYP=7
	4995	LEAR	49	GB	0923.3	0923.3	8.3	3600.0			QL=6 ST=2 TYP=7
	245	LEAR	49	GB	0923.3	0923.5	8.3	169.0			QL=6 ST=2 TYP=7
	610	LEAR	49	GB	0923.3	0923.5	8.3	160.0			QL=6 ST=2 TYP=7
	8800	LEAR	49	GB	0923.3	0923.5	8.3	1300.0			QL=6 ST=2 TYP=7
	1415	LEAR	49	GB	0923.3	0923.5	8.3	1399.0			QL=6 ST=2 TYP=7
	410	LEAR	49	GB	0923.3	0923.5	8.3	60.0			QL=6 ST=2 TYP=7
	260	ONDR	29	PBI	0928.0	1002.0	52.0	30.0	26.0		
	1415	LEAR	49	GB	0931.6	0931.8	2.4D	1600.0			QL=6 ST=2 TYP=7
	2695	LEAR	49	GB	0931.6	0931.8	2.4D	2000.0			QL=6 ST=2 TYP=7
	4995	LEAR	49	GB	0931.6	0931.8	2.4D	1600.0			QL=6 ST=2 TYP=7
	8800	LEAR	49	GB	0931.6	0931.8	2.4D	930.0			QL=6 ST=2 TYP=7

SOLAR RADIO EMISSION
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MAY 1983

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
15	15400	LEAR	49	GB	0931.6	0932.1	2.4D	600.0			QL=6 ST=2 TYP=7
	245	LEAR	49	GB	0931.6	0932.3	2.4D	39.0			QL=6 ST=2 TYP=7
	610	LEAR	49	GB	0931.6	0932.3	2.4D	80.0			QL=6 ST=2 TYP=7
	410	LEAR	49	GB	0931.6	0932.5	2.4D	21.0			QL=6 ST=2 TYP=7
	950	GORK	29	PBI	1015.0	1015.0	33.0D	107.0			
	536	ONDR	29	PBI	1020.0		50.0				
	650	GORK	29	PBI	1024.0	1024.0	32.0D	65.0			
	2800	OTTA	260	FAL	1055.0	1447.0	232.0D	-41.0			
	430	KRAK	8	S	1200.5	1200.7	.7	15.0			
	33	UPIC	42	SER	1406.5	1611.0	126.6				
	29	UPIC	42	SER	1407.0	1611.3	126.4				
	930	BORD	41	F	1611.0	1611.3	2.6	20.0	2.0		
	245	SGMR	49	GB	1611.0	1612.0	1.6	520.0			QL=6 ST=2 TYP=6
	410	SGMR	47	GB	1611.8	1612.0	.8	380.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1612.1	1612.1	.5	56.0			QL=6 ST=2 TYP=5
	15400	SGMR	4	S/F	1616.3	1618.8	13.2	37.0			QL=6 ST=2 TYP=3
	2800	OTTA	260	FAL	1635.0	1655.0	20.0	-3.2	-1.6		
	9400	HUAN	20	GRF	1709.3	1730.1	28.0	10.8	7.1		0
	9400	HUAN	2	S/F	1800.4	1802.1	4.3	13.1	5.1		0
	245	PALE	47	GB	1816.8	1817.0	1.0	180.0			QL=6 ST=2 TYP=5
	610	PALE	8	S	1817.3	1817.5	.3	18.0			QL=6 ST=2 TYP=3
	930	BORD	41	F	1818.0	1818.4	1.0	23.0	2.0		
	410	PALE	8	S	1818.6	1818.6	.2	19.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	1933.3	1933.3	.3	53.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	1933.3	1933.5	.3	169.0			QL=6 ST=2 TYP=5
	3750	TYKW	20	GRF	2205.0	2220.0	80.0	2.0	1.0		RAIN
16	260	ONDR	44	NS	0550.0E		496.0D	175.0			
	245	LEAR	43	NS	0604.3	0707.8	209.7D	35.0			QL=6 ST=2 TYP=1
	33	UPIC	43	NS	0717.0		643.0D				
	29	UPIC	43	NS	0717.2		642.8D				
	208	VORO	44	NS	2100.0E		360.0D				
	15400	LEAR	4	S/F	0004.1	0007.1	7.9	10.0			QL=6 ST=2 TYP=3
	500	HIRA	8	S	0006.7	0006.7	.5	200.0			0
	1000	TYKW	45	C	0007.0	0011.2	5.0	34.0	4.0		
	410	LEAR	47	GB	0007.1	0007.1	2.0	82.0			QL=6 ST=2 TYP=5
	8800	LEAR	4	S/F	0007.1	0007.1	4.9	11.0			QL=6 ST=2 TYP=3
	610	LEAR	4	S/F	0007.1	0011.1	4.9	11.0			QL=6 ST=2 TYP=3
	2695	LEAR	4	S/F	0041.8	0043.1	5.0	10.0			QL=6 ST=2 TYP=3
	3750	TYKW	45	C	0042.0	0043.6	3.0	14.0	4.0		
	9400	TYKW	45	C	0042.0	0043.6	3.0	83.0	23.0		
	1415	LEAR	4	S/F	0042.0	0043.1	2.8	5.0			QL=6 ST=2 TYP=3
	8800	LEAR	47	GB	0042.3	0043.1	1.8	71.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0042.3	0043.3	4.0	18.0	5.0		
	500	HIRA	8	S	0042.5	0042.7	.8	75.0			0
	2000	TYKW	45	C	0042.5	0043.5	2.0	5.0	1.5		
	8800	PALE	47	GB	0042.6	0043.1	1.4	81.0			QL=6 ST=2 TYP=5
	15400	LEAR	8	S	0042.6	0043.1	1.2	41.0			QL=6 ST=2 TYP=3
	4995	PALE	8	S	0042.8	0043.1	1.0	31.0			QL=6 ST=2 TYP=3
	2695	PENT	1	S	0042.8	0043.5	2.0	7.6	2.6		
	410	LEAR	47	GB	0043.0	0043.1	.6	189.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	0043.0	0043.3	.6	250.0			QL=6 ST=2 TYP=5
	245	LEAR	8	S	0043.1	0043.1	2.0	6.0			QL=6 ST=2 TYP=3
	15400	PALE	8	S	0043.1	0043.3	.4	31.0			QL=6 ST=2 TYP=3
	610	LEAR	47	GB	0043.1	0043.3	.2	50.0			QL=6 ST=2 TYP=5
	610	PALE	8	S	0043.1	0043.3	.5	49.0			QL=6 ST=2 TYP=3
	9400	TYKW	29	PBI	0045.0		15.0	7.0	2.5		
	9400	TYKW	5	S	0133.5	0134.5	2.5	3.0	1.0		
	610	LEAR	8	S	0319.1	0319.3	.9	11.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0319.3	0319.3	.7	8.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0319.3	0319.5	.7	30.0			QL=6 ST=2 TYP=3
	9395	PEKG	3	S	0422.0	0422.8	3.0	20.5	5.3		
	9400	TYKW	45	C	0422.5	0422.8	2.5	17.0	6.0		
	9100	GORK	2	S/F	0422.5	0423.0	2.8	14.5			
	8800	LEAR	8	S	0422.6	0423.0	.5	13.0			QL=6 ST=2 TYP=3
	15400	LEAR	47	GB	0422.8	0424.1	1.3	66.0			QL=6 ST=2 TYP=5
	9400	TYKW	30	PBI	0425.0		30.0	4.0	2.0		
	9400	TYKW	5	S	0442.5	0443.4	2.5	10.0	3.0		
	9100	GORK	2	S/F	0443.2	0443.5	5.4	7.2			
	245	LEAR	47	GB	0446.1	0446.3	.5	78.0			QL=6 ST=2 TYP=5
	3750	TYKW	20	GRF	0534.0	0606.0	135.0	4.0	2.0		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

MAY 1983

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
16	2000	TYKW	20	GRF	0535.0	0610.0	140.0	2.0	1.0		
	9400	TYKW	21	GRF	0545.0	0610.0	75.0	4.0	2.0		
	9400	TYKW	45	C	0601.7	0603.8	2.3D	11.0	3.0D		
	9100	GORK	2	S/F	0601.9	0603.8	2.2	108.0			
	245	LEAR	8	S	0628.3	0629.8	1.5	17.0			QL=6 ST=2 TYP=3
	100	GORK	4	S/F	0702.6	0703.9	3.2	20.0D			
	410	LEAR	4	S/F	0752.1	0754.3	3.0	21.0			QL=6 ST=2 TYP=3
	430	KRAK	8	S	0754.2	0754.3	.2	61.0			
	410	LEAR	8	S	0832.8	0833.5	2.0	11.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0833.3	0833.5	.8	8.0			QL=5 ST=2 TYP=3
	610	LEAR	8	S	0833.3	0833.5	.3	21.0			QL=6 ST=2 TYP=3
	1470	POTS	42	SER	1127.0	1153.5	28.0	4.5			
	9500	POTS	42	SER	1132.0	1153.6	26.0	32.0			
	2800	OTTA	8	S	1133.4	1133.7	.5	2.8			
	3000	POTS	42	SER	1135.0	1143.5	12.0	8.0			
	2800	OTTA	21	GRF	1135.0	1240.0	90.0	3.4	1.9		
	650	GORK	21	GRF	1136.5	1143.7	10.3	45.0			
	9100	GORK	21	GRF	1136.6	1152.0	234.0D	10.0			
	2800	OTTA	1	S	1137.0	1137.4	1.0	2.8	1.0		
	930	BORD	3	S	1137.0	1137.7	4.0	18.0	4.0		
	810	KRAK	3	S	1137.0	1137.5	2.2	12.0	5.0		
	950	GORK	4	S/F	1137.0	1137.5	3.6	24.0			
	536	ONDR	4	S/F	1137.0	1138.0	3.0	8.0	6.0		
	808	ONDR	2	S/F	1137.0	1138.0	3.0	17.0	12.0		
	610	SGMR	8	S	1137.1	1137.5	2.0	35.0			QL=6 ST=2 TYP=3
	650	GORK	4	S/F	1137.2	1137.5	2.4	17.0	8.0		
	9100	GORK	2	S/F	1137.3	1137.4	4.2	9.0			
	2800	OTTA	45	C	1140.0	1143.5	5.0	5.0	2.3		
	810	KRAK	8	S	1140.0	1140.2	.5	6.0			
	2950	GORK	2	S/F	1140.6	1143.6	3.6	4.9			
	245	SGMR	8	S	1144.8	1145.0	.5	40.0			QL=6 ST=2 TYP=3
	9400	HUAN	4	S/F	1150.6	1153.2	6.5	40.3	14.6		0
	9100	GORK	2	S/F	1152.0	1153.7	3.6	22.0			
	536	ONDR	2	S/F	1158.0	1159.5	4.0	4.0	3.0		
	610	SGMR	8	S	1159.1	1200.8	1.9	25.0			QL=6 ST=2 TYP=3
	8800	ATHN	8	S	1330.1	1330.5	.9	13.0			QL=5 ST=2 TYP=3
	1415	ATHN	8	S	1330.8	1331.1	.5	16.0			QL=5 ST=2 TYP=3
	9500	POTS	29	PBI	1400.0	1402.5	50.0	76.0			
	9400	HUAN	4	S/F	1400.1	1402.3	4.1	77.8	41.7		R
	8800	ATHN	47	GB	1400.3	1402.3	4.5	72.0			QL=6 ST=2 TYP=5
	11800	BERN	4	S/F	1400.4	1401.8	9.0	117.0			
	8400	BERN	3	S	1400.4	1402.4	9.0	78.0			
	19600	BERN	3	S	1400.4	1402.5	9.0	55.0			
	15400	SGMR	47	GB	1401.1	1401.8	1.7	82.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1401.3	1402.3	2.8	64.0			QL=6 ST=2 TYP=5
	9400	HUAN	29	PBI	1404.2	1404.2	35.3	20.8	5.4		R
	8800	ATHN	4	S/F	1411.3	1414.6	5.3D	18.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	1438.0	1438.1	1.0	4.2	2.1		
	2800	OTTA	21	GRF	1530.0	1735.0	340.0	15.6	7.0		
	2800	OTTA	1	S	1538.0	1539.0	3.0	2.8	1.3		
	3100	BERN	3	S	1630.0	1632.5	7.0	26.0			ONLY PAPER REC
	2800	OTTA	3	S	1631.2	1633.0	4.0	16.6	5.4		
	2800	OTTA	1	S	1652.0	1653.0	2.0	9.0	3.0		
	245	PALE	49	GB	1652.3	1652.6	.8	1199.0			QL=6 ST=2 TYP=6
	410	SGMR	8	S	1652.5	1652.6	1.3	15.0			QL=6 ST=2 TYP=3
	245	SGMR	49	GB	1652.5	1652.6	.6	820.0			QL=6 ST=2 TYP=6
	410	PALE	8	S	1652.6	1652.6	.4	25.0			QL=6 ST=2 TYP=3
	9400	HUAN	2	S/F	1657.4	1659.9	3.7	9.7	4.0		0
	245	PALE	8	S	1658.6	1658.8	.4	17.0			QL=6 ST=2 TYP=3
	610	PALE	47	GB	1702.8	1703.0	.7	100.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1702.8	1703.0	.7	59.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	1702.9	1703.1	1.0	139.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	1702.8	1703.1	1.0	86.0			QL=6 ST=2 TYP=5
	245	PALE	49	GB	1702.8	1703.1	1.0	2000.0			QL=6 ST=2 TYP=6
	245	SGMR	49	GB	1702.8	1703.1	1.0	1500.0			QL=6 ST=2 TYP=6
	930	BORD	41	F	1716.7	1716.8	.4	27.0	2.0		
	245	PALE	8	S	1747.3	1747.6	.5	49.0			QL=6 ST=2 TYP=3
	245	SGMR	8	S	1747.3	1747.6	.5	34.0			QL=6 ST=2 TYP=3
	2800	OTTA	20	GRF	2140.0	2155.0	30.0	2.0	0.8		
	200	HIRA	42	SER	2157.3	2157.9	6.0	180.0			WL
	100	HIRA	42	SER	2158.5	2158.9	6.0	270.0			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

MAY 1983

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
16	245	PALE	47	GB	2158.8	2158.8	.5	110.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	2158.8	2159.0	.5	90.0			QL=6 ST=2 TYP=5
	100	HIRA	41	F	2244.7	2249.1	6.3	285.0			
	3750	TYKW	20	GRF	2245.0	2250.0	45.0	1.5	0.7		
	1000	TYKW	5	S	2246.4	2246.8	1.5	3.0	1.0		
	200	HIRA	42	SER	2247.5	2248.8	3.5	300.0			WR
	245	PALE	47	GB	2247.8	2249.1	1.8	200.0			QL=6 ST=2 TYP=5
	208	VORO	40	F	2248.0	2250.0	4.0	270.0			
	245	SGMR	47	GB	2249.0	2249.1	.6	189.0			QL=6 ST=2 TYP=5
	2695	LEAR	47	GB	2354.1	2354.8	.9	50.0			QL=6 ST=2 TYP=5
17	245	LEAR	43	NS	0421.1	0625.8	312.9D	29.0			QL=6 ST=2 TYP=1
	260	ONDR	44	NS	0550.0E		490.0D	27.0			
	33	UPIC	43	NS	0722.7		637.3D				
	29	UPIC	43	NS	0722.8		637.2D				
	410	LEAR	8	S	0053.1	0053.5	.5	15.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0145.8	0146.0	.7	50.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	0147.3	0147.8	2.8	56.0			QL=6 ST=2 TYP=5
	245	PALE	49	GB	0209.0	0209.1	.3	1100.0			QL=6 ST=3 TYP=6
	245	LEAR	8	S	0255.1	0255.8	1.0	15.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0351.3	0352.3	1.5	20.0			QL=5 ST=2 TYP=3
	410	LEAR	47	GB	0355.1	0355.8	.9	60.0			QL=6 ST=2 TYP=5
	245	LEAR	49	GB	0355.3	0355.3	1.0	1100.0			QL=6 ST=2 TYP=6
	245	PALE	49	GB	0355.3	0355.5	1.0	1199.0			QL=6 ST=2 TYP=6
	410	PALE	47	GB	0355.6	0355.8	.5	160.0			QL=6 ST=2 TYP=5
	245	LEAR	47	GB	0400.1	0400.3	4.0	90.0			QL=6 ST=2 TYP=5
	245	LEAR	8	S	0459.1	0459.5	.7	26.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0459.3	0459.5	.5	6.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0459.3	0459.5	.5	11.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0555.8	0555.8	.3	13.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0555.8	0555.8	.3	11.0			QL=6 ST=2 TYP=3
	3750	TYKW	20	GRF	0650.0	0703.0	45.0	2.0	1.0		
	930	BORD	41	F	1108.4	1108.9	.6	17.0	2.0		
	930	BORD	8	S	1148.8	1149.0	.3	36.0	2.0		
	234	POTS	8	S	1242.0	1242.1	.5	450.0	150.0		
	2800	OTTA	21	GRF	1520.0	1610.0	85.0	3.0	1.7		
	245	SGMR	49	GB	1611.3	1611.6	2.0	2399.0			QL=6 ST=2 TYP=6
	2800	OTTA	1	S	1636.0	1636.3	1.0	3.4	1.1		
	2800	OTTA	20	GRF	1650.0	1730.0	60.0	2.2	1.1		
	245	PALE	49	GB	1729.1	1729.1	.7	650.0			QL=6 ST=2 TYP=6
	245	SGMR	49	GB	1729.1	1729.3	.7	500.0			QL=6 ST=2 TYP=6
	245	PALE	47	GB	1740.0	1740.1	.5	430.0			QL=6 ST=2 TYP=5
	930	BORD	41	F	1747.3	1747.6	.3	36.0	2.0		
	2800	OTTA	20	GRF	1755.0	1830.0	90.0	4.4	3.0		
	245	PALE	49	GB	1813.6	1813.8	.5	1899.0			QL=6 ST=2 TYP=6
	245	SGMR	47	GB	1859.6	1859.8	2.2	90.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	1859.6	1859.8	2.2	119.0			QL=5 ST=2 TYP=5
	245	PALE	8	S	1931.8	1932.1	.3	16.0			QL=6 ST=2 TYP=3
	2800	OTTA	22	GRF	1945.0	2015.0	115.0	4.2	2.6		
	245	SGMR	47	GB	2014.6	2014.8	.5	219.0			QL=6 ST=2 TYP=5
	200	HIRA	42	SER	2114.7	2120.6	7.3	310.0			0
	100	HIRA	42	SER	2114.7	2121.8	7.6	7100.0			
	245	PALE	47	GB	2114.8	2114.8	.3	400.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	2114.8	2114.8	.5	270.0			QL=6 ST=2 TYP=5
	3750	TYKW	32	ABS	2120.0	2150.0	60.0	-4.0	-2.0		
	245	PALE	49	GB	2120.8	2121.1	1.7	690.0			QL=6 ST=2 TYP=6
	245	SGMR	49	GB	2120.8	2121.1	1.7	500.0			QL=6 ST=2 TYP=6
	410	PALE	47	GB	2121.0	2121.1	.3	71.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	2121.0	2121.1	1.1	56.0			QL=6 ST=2 TYP=5
	610	SGMR	8	S	2121.0	2121.1	.6	37.0			QL=6 ST=2 TYP=3
	2000	TYKW	32	ABS	2125.0	2150.0	60.0	-3.0	-1.5		
	2800	OTTA	240	R	2155.0	2215.0	20.0	2.4	1.2		
	2695	PENT	20	GRF	2230.0	2300.0	55.0	2.4	1.4		
	245	SGMR	8	S	2307.3	2307.5	.5	45.0			QL=6 ST=2 TYP=3
	3750	TYKW	32	ABS	2312.0	2327.0	65.0	-3.0	-1.5		
	2000	TYKW	32	ABS	2322.0	2332.0	50.0	-2.0	-1.0		
18	260	ONDR	44	NS	0547.0E		496.0D	108.0			
	29	UPIC	43	NS	0830.2		489.1				
	33	UPIC	43	NS	0831.3		488.0				
	245	LEAR	43	NS	2307.0	0629.0	626.0D	119.0			QL=6 ST=2 TYP=1

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
18	245	LEAR	43	NS	2308.0	0353.5	625.0D	37.0			QL=6 ST=2 TYP=1
	2000	TYKW	32	ABS	0055.0	0135.0	80.0	-1.5	-0.7		
	3750	TYKW	32	ABS	0058.0	0110.0	115.0	-3.0	-1.5		
	245	PALE	47	GB	0108.3	0108.3	.5	98.0			QL=6 ST=2 TYP=5
	3750	TYKW	32	ABS	0337.0	0400.0	60.0	-3.0	-1.5		
	2000	TYKW	32	ABS	0340.0	0350.0	60.0	-1.5	-0.7		
	2000	TYKW	5	S	0444.0	0448.0	10.0	1.5	0.5		
	3750	TYKW	21	GRF	0510.0	0533.0	32.0	2.0	1.0		
	410	LEAR	8	S	0530.6	0530.6	.2	26.0			QL=6 ST=2 TYP=3
	2000	TYKW	32	ABS	0538.0	0600.0	100.0	-5.0	-2.5		
	3750	TYKW	31	ABS	0542.0	0557.0	97.0	-6.0	-3.0		
	9400	TYKW	32	ABS	0542.0	0557.0	95.0	-8.0	-4.0		
	100	HIRA	42	SER	0623.4	0633.5	11.3	2700.0			
	200	HIRA	45	C	0628.4	0628.8	1.0	340.0	85.0		0
	204	IZMI	5	S	0628.5	0628.7	1.0	300.0	150.0		
	3100	CRIM	24	R	0650.0	0950.0		5.0			
	430	KRAK	8	S	0727.5	0727.7	.4	17.0			
	610	LEAR	47	GB	0731.3	0731.8	.8	50.0			QL=6 ST=2 TYP=5
	536	ONDR	8	S	0731.5	0731.5	.5	52.0			
	410	LEAR	47	GB	0731.6	0731.8	.5	100.0			QL=6 ST=2 TYP=5
	245	LEAR	4	S/F	0823.0	0829.8	11.0	40.0			QL=6 ST=2 TYP=3
	200	HIRA	46	C	0823.3	0830.0	15.3	16.0	6.0		0
	204	IZMI	22	GRF	0824.0	0831.2	16.5	26.0	18.0		
	410	LEAR	47	GB	0825.1	0830.3	8.9	83.0			QL=6 ST=2 TYP=5
	430	KRAK	45	C	0825.5	0830.0	20.0	140.0	30.0		
	430	KRAK			0825.5	0835.0		60.0			
	500	HIRA	46	C	0826.8	0829.7	14.0	55.0	25.0		WR
	610	LEAR	4	S/F	0826.8	0830.6	7.2	27.0			QL=6 ST=2 TYP=3
	500	HIRA			0826.8	0835.0		45.0			WR
	536	ONDR	46	C	0827.0	0830.0	20.0	29.0	20.0		
	650	GORK	46	C	0827.0	0830.1	14.0	17.0			
	650	GORK			0827.0	0835.4		21.0			
	810	KRAK	1	S	0829.3	0830.0	1.0	2.0			
	100	GORK	46	C	0830.8	0832.3	4.8	20.0D			
	100	GORK			0830.8	0833.1		20.0D			
	100	GORK	46	C	0830.8	0834.0		20.0D			
	610	LEAR	8	S	0834.3	0835.1	1.8	26.0			QL=6 ST=2 TYP=3
	410	LEAR	47	GB	0834.3	0836.5	3.0	180.0			QL=6 ST=2 TYP=5
	810	KRAK	1	S	0834.5	0835.0	.8	2.0			
	260	ONDR	45	C	0835.0E	0848.0	16.0D	47.0	7.0		
	808	ONDR	8	S	1151.0	1151.5	.5	25.0			
	245	SGMR	47	GB	1209.8	1210.1	.5	160.0			QL=6 ST=2 TYP=5
	410	SGMR	8	S	1210.0	1210.1	.1	18.0			QL=6 ST=2 TYP=3
	536	ONDR	8	S	1237.0	1237.0	.5	13.0			
	2800	OTTA	1	S	1322.7	1322.9	6.0	9.0			
	410	SGMR	47	GB	1400.8	1401.6	2.8	119.0			QL=6 ST=2 TYP=5
	930	BORD	41	F	1401.0	1402.5	1.5U	18.0	2.0		
	930	BORD	8	S	1412.8	1412.8	.1	21.0	1.0		
	245	SGMR	47	GB	1434.6	1434.6	.4	82.0			QL=6 ST=2 TYP=5
	2800	OTTA	20	GRF	1440.0	1540.0	125.0	2.8	2.0		
	930	BORD	41	F	1531.8	1531.9	1.0	25.0	2.0		
	245	SGMR	49	GB	1532.3	1532.5	.5	760.0			QL=6 ST=2 TYP=6
	410	PALE	49	GB	1650.6	1650.8	1.4	850.0			QL=6 ST=3 TYP=6
	410	SGMR	47	GB	1650.6	1650.8	1.5	239.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	1717.1	1717.3	1.2	430.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	1717.1	1717.3	1.2	460.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	1717.3	1718.6	2.3	110.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1717.3	1718.6	2.3	100.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	1717.5	1717.6	.5	72.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	1717.5	1717.6	.5	52.0			QL=6 ST=2 TYP=5
	2800	OTTA	21	GRF	1730.0	1850.0	215.0	5.6	2.6		
	245	SGMR	47	GB	1744.1	1744.1	.4	69.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	1744.1	1744.1	.5	85.0			QL=6 ST=2 TYP=5
	2695	SGMR	20	GRF	1758.1	1800.8	4.5	42.0			QL=6 ST=2 TYP=2
	245	PALE	47	GB	1759.1	1800.8	2.0	75.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	1800.6	1800.8	.5	71.0			QL=6 ST=2 TYP=5
	2800	OTTA	1	S	1808.0	1809.5	3.0	3.8	1.2		
	2695	SGMR	47	GB	1809.1	1817.0	23.2	189.0			QL=6 ST=2 TYP=5
	9400	HUAN	20	GRF	1816.8	1842.4	45.9	5.6	1.4		0
	245	PALE	49	GB	1849.6	1849.6	1.7	100.0			QL=6 ST=2 TYP=6
	245	SGMR	49	GB	1849.6	1850.1	1.7	1199.0			QL=6 ST=2 TYP=6

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
18	610	SGMR	47	GB	1849.8	1850.3	1.5	54.0			QL=6 ST=2 TYP=5
	610	PALE	8	S	1850.0	1850.3	1.1	50.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	1850.0	1850.3	.8	65.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	1926.3	1926.6	.7	60.0			QL=6 ST=3 TYP=5
	245	PALE	4	S/F	1929.0	1931.1	2.8	44.0			QL=6 ST=3 TYP=3
	245	PALE	8	S	1939.8	1939.8	.3	25.0			QL=6 ST=2 TYP=3
	245	PALE	8	S	2003.3	2003.5	.5	49.0			QL=6 ST=2 TYP=3
	200	HIRA	8	S	2049.0	2049.0	.5	2500.0			0
	100	HIRA	8	S	2049.1	2049.2	.5	620.0			
	245	SGMR	49	GB	2049.1	2049.3	.9	1500.0			QL=6 ST=2 TYP=6
	410	SGMR	8	S	2049.1	2049.3	.9	13.0			QL=6 ST=2 TYP=3
	245	PALE	49	GB	2049.3	2049.3	.5	1399.0			QL=6 ST=2 TYP=6
	245	PALE	49	GB	2054.1	2054.1	.4	1199.0			QL=6 ST=2 TYP=6
	245	PALE	47	GB	2153.8	2153.8	.3	110.0			QL=6 ST=2 TYP=5
	245	SGMR	8	S	2153.8	2154.0	.5	73.0			QL=6 ST=2 TYP=3
	200	HIRA	42	SER	2245.3	2247.6	6.5	1300.0			0
	245	PALE	47	GB	2246.0	2247.6	3.8	450.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	2247.6	2247.6	2.2	380.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	2247.6	2247.6	.5	89.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	2247.6	2247.8	.5	150.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2256.8	2257.0	.5	80.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	2256.8	2257.0	.5	52.0			QL=6 ST=2 TYP=5
	8800	LEAR	4	S/F	2311.3	2314.0	4.2	30.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	2312.6	2312.8	.9	1199.0			QL=6 ST=2 TYP=6
	245	PALE	49	GB	2312.6	2313.0	1.0	1300.0			QL=6 ST=2 TYP=6
	245	LEAR	49	GB	2312.8	2313.0	.7	1000.0			QL=4 ST=2 TYP=6
	15400	LEAR	47	GB	2313.0	2314.1	2.0	150.0			QL=4 ST=2 TYP=5
	2695	LEAR	47	GB	2313.0	2314.3	2.1	110.0			QL=4 ST=2 TYP=5
	4995	LEAR	8	S	2313.3	2314.1	1.7	30.0			QL=4 ST=2 TYP=3
	100	HIRA	46	C	2327.6	2328.5	1.3	375.0	80.0		
19	260	ONDR	44	NS	0550.0E		499.0D	32.0			
	200	HIRA	43	NS	2132.0	0111.0	720.0D	25.0	5.0		WR
	245	LEAR	47	GB	0102.0	0102.1	.1	219.0			QL=6 ST=2 TYP=5
	410	LEAR	8	S	0102.0	0102.1	.1	10.0			QL=6 ST=2 TYP=3
	100	HIRA	46	C	0544.0	0544.6	1.2	340.0	115.0		
	29	UPIC	42	SER	0544.5	0545.0	277.0				
	33	UPIC	42	SER	0544.5	0545.1	277.3				
	810	KRAK	8	S	0823.3	0823.5	.4	10.0			
	9100	GORK	2	S/F	0931.2	0932.5	2.2	9.3	4.0		
	2950	GORK	1	S	0931.4	0932.3	2.1	3.3			
	808	ONDR	1	S	0933.0	0933.3	.5	20.0			
	810	KRAK	8	S	0933.2	0933.5	.5	8.0			
	204	IZMI	5	S	0934.8	0934.9	.5	180.0D			
	234	POTS	4	S/F	0935.7	0935.8	.3	250.0	40.0		
	2950	GORK	20	GRF	1009.8	1016.8	25.3	50.0	2.0		
	245	SGMR	8	S	1126.3	1126.5	.8	45.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	1128.5	1128.6	1.8	110.0			QL=6 ST=2 TYP=5
	536	ONDR	1	S	1129.0	1129.0	.5	7.0	6.0		
	536	ONDR	8	S	1223.5	1223.5	.1	14.0			
	2800	OTTA	20	GRF	1235.0	1320.0	115.0	2.8	2.0		
	2800	OTTA	240	R	1533.0	1548.0	15.0	5.4	2.5		
	245	PALE	47	GB	1921.6	1921.8	.5	110.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	1921.6	1921.8	.5	89.0			QL=6 ST=2 TYP=5
	9400	TYKW	5	S	2138.3	2138.6	1.0	6.0	2.0		
	245	PALE	8	S	2138.8	2138.8	.3	45.0			QL=6 ST=2 TYP=3
	3750	TYKW	21	GRF	2200.0	2320.0	500.0	10.0	5.0		
	1000	TYKW	21	GRF	2200.0	2320.0	430.0	3.0	1.5		
	2000	TYKW	21	GRF	2200.0	2320.0	430.0	4.0	2.0		
	2800	OTTA	240	R	2205.0	2315.0	70.0	7.4	4.0		
	9400	TYKW	20	GRF	2220.0	2315.0	100.0	6.0	3.0		
	1000	TYKW	5	S	2326.6	2326.7	1.0	47.0	4.0		
	610	LEAR	8	S	2326.6	2326.8	.5	26.0			QL=4 ST=2 TYP=3
	410	LEAR	47	GB	2326.6	2326.8	.4	380.0			QL=4 ST=2 TYP=5
	245	LEAR	47	GB	2326.6	2326.8	.5	100.0			QL=4 ST=2 TYP=5
	2695	PENT	8	S	2327.0	2327.0	.2	5.0			
	410	LEAR	47	GB	2329.8	2330.1	1.0	66.0			QL=4 ST=2 TYP=5
	245	LEAR	8	S	2330.0	2330.1	.5	25.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	2330.0	2330.1	.3	11.0			QL=4 ST=2 TYP=3
	245	PALE	47	GB	2337.6	2338.1	3.2	320.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	2338.1	2338.1	2.5	88.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
20	245	PALE	43	NS	0045.0	0408.8	213.0D	139.0			QL=6 ST=2 TYP=1
	100	GORK	44	NS	0300.0E		534.0D		10.0		
	245	LEAR	43	NS	0454.1	0812.3	277.9D	38.0			QL=6 ST=2 TYP=1
	260	ONDR	44	NS	0547.0E		200.0D	37.0			
	127	TORN	44	NS	0920.0E	1116.0	380.0D	40.0	7.0		V=1
	200	HIRA	43	NS	2050.0	2150.0	760.0D	300.0	75.0		ML
	100	HIRA	43	NS	2054.0	2225.0	760.0D	450.0	140.0		
	208	VORO	44	NS	2100.0E		360.0D		59.0		
	2695	PENT	21	GRF	0010.0	0140.0	90.0D	16.2			
	4995	LEAR	4	S/F	0019.8E	0032.3	34.2D	24.0			QL=6 ST=2 TYP=3
	3750	TYKW	45	C	0020.0	0029.6	20.0	16.0	8.0		
	9400	TYKW			0020.0	0032.0		13.0			
	9400	TYKW	45	C	0020.0	0044.4	50.0	41.0	12.0		
	15400	LEAR	47	GB	0020.5E	0044.5	33.5D	52.0			QL=6 ST=2 TYP=5
	8800	LEAR	4	S/F	0020.6E	0044.3	33.4D	38.0			QL=6 ST=2 TYP=3
	2695	LEAR	4	S/F	0021.0E	0025.1	33.0D	18.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0021.3	0041.1	32.7	89.0			QL=6 ST=2 TYP=5
	2000	TYKW	45	C	0023.0	0029.7	32.0	20.0	8.0		
	1000	TYKW	45	C	0023.0	0032.1	32.0	28.0	6.0		
	610	LEAR	4	S/F	0023.1E	0030.3	30.9D	48.0			QL=6 ST=2 TYP=3
	2695	PENT	22	GRF	0023.3	0029.8	15.0	14.4	7.0		
	1415	LEAR	4	S/F	0023.5E	0032.1	30.5D	24.0			QL=6 ST=2 TYP=3
	410	LEAR	47	GB	0024.0E	0032.1	30.0D	58.0			QL=6 ST=2 TYP=5
	500	HIRA	42	SER	0024.2	0032.0	72.0	45.0			ML
	610	PALE	4	S/F	0029.0	0030.3	6.8	38.0			QL=6 ST=2 TYP=3
	410	PALE	4	S/F	0029.5	0032.1	3.3	46.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	0029.8	0030.1	2.3	56.0			QL=6 ST=2 TYP=5
	1415	PALE	8	S	0031.8	0032.0	.3	13.0			QL=6 ST=2 TYP=3
	3750	TYKW	30	PBI	0040.0		270.0	8.0	4.0		
	9395	PEKG	3	S	0044.0	0044.6	15.0	16.9	5.5		
	15400	PALE	8	S	0044.3	0044.3	.3	44.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	0044.3	0044.3	.3	31.0			QL=6 ST=2 TYP=3
	3750	TYKW	45	C	0045.0	0051.0	11.0	4.0	2.0		
	1000	TYKW	30	PBI	0055.0		270.0	2.0	1.0		
	2000	TYKW	30	PBI	0055.0		245.0	4.0	2.0		
	3750	TYKW	45	C	0100.0	0111.5	14.0	2.0	1.0		
	2000	TYKW	45	C	0101.0	0110.1	13.0	4.0	1.5		
	610	LEAR	47	GB	0104.3	0110.1	9.8	58.0			QL=6 ST=2 TYP=5
	245	LEAR	4	S/F	0104.3	0110.1	10.5	20.0			QL=6 ST=2 TYP=3
	410	LEAR	4	S/F	0107.3	0110.1	7.2	23.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0109.0	0111.3	6.0	5.0	2.0		
	610	PALE	4	S/F	0109.5	0110.1	3.0	49.0			QL=6 ST=2 TYP=3
	410	PALE	8	S	0109.6	0111.3	2.0	17.0			QL=6 ST=2 TYP=3
	9400	TYKW	30	PBI	0110.0		240.0	10.0	5.0		
	2000	TYKW	5	S	0116.0	0117.2	2.0	2.0	0.7		
	3750	TYKW	5	S	0116.5	0118.0	4.0	1.5	0.5		
	3750	TYKW	45	C	0121.0	0122.2	8.0	2.0	1.0		
	2000	TYKW	20	GRF	0130.0	0140.0	140.0	8.0	4.0		
	3750	TYKW	45	C	0131.0	0139.3	34.0	10.0	7.0		
	9400	TYKW	20	GRF	0133.0	0140.0	35.0	12.0	4.0		
	3750	TYKW	30	PBI	0205.0		110.0	7.0	3.5		
	9400	TYKW	20	GRF	0220.0	0255.0	100.0	6.0	3.0		
	9100	GORK	21	GRF	0303.0E	0316.8U	267.0D	19.0			
	410	LEAR	8	S	0304.3	0304.5	.3	13.0			QL=6 ST=2 TYP=3
	2950	GORK	20	GRF	0305.0E	0309.5	189.0D	16.6			
	610	LEAR	8	S	0305.3	0305.6	.8	16.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0334.0	0335.0	3.0	1.0	0.3		
	9400	TYKW	20	GRF	0430.0	0434.0	30.0	4.0	2.0		
	245	LEAR	8	S	0430.5	0430.8	.6	20.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0431.8	0432.1	1.2	15.0			QL=6 ST=2 TYP=3
	610	LEAR	47	GB	0437.5	0437.8	.6	340.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	0437.6	0437.8	.5	89.0			QL=6 ST=2 TYP=5
	3750	TYKW	5	S	0501.0	0502.2	7.0	2.0	1.0		
	610	LEAR	8	S	0518.1	0518.3	.2	10.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0518.1	0518.3	.2	71.0			QL=6 ST=2 TYP=5
	3750	TYKW	45	C	0520.0	0521.7	5.0	5.0	3.0		
	2000	TYKW	20	GRF	0520.0	0525.0	40.0	2.0	1.0		
	9400	TYKW	21	GRF	0520.0	0530.0	40.0	6.0	3.0		
	245	LEAR	8	S	0521.8	0522.0	.3	48.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0521.8	0522.0	.3	8.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	0523.0	0523.6	2.0	6.0	2.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
20	9100	GORK	1	S	0523.0	0523.7	1.2	7.2	3.0		
	3750	TYKW	30	PBI	0525.0		20.0	3.0	1.5		
	3750	TYKW	5	S	0536.0	0537.0	3.0	6.0	2.0		
	9100	GORK	1	S	0536.9	0537.1	1.0	5.4	2.0		
	1000	TYKW	45	C	0550.0	0550.5	1.5	36.0	4.0		
	610	LEAR	49	GB	0550.3	0550.5	.7	2899.0			QL=6 ST=2 TYP=6
	650	GORK	4	S/F	0550.3	0550.5U	1.3	130.0D			
	410	LEAR	47	GB	0550.6	0550.6	.4	110.0			QL=6 ST=2 TYP=5
	245	LEAR	47	GB	0550.8	0551.0	.3	150.0			QL=6 ST=2 TYP=5
	200	HIRA	8	S	0613.6	0613.9	.6	54.0			ML
	610	LEAR	47	GB	0632.0	0632.1	.1	59.0			QL=6 ST=3 TYP=5
	410	LEAR	8	S	0632.0	0632.1	.1	5.0			QL=6 ST=3 TYP=3
	3750	TYKW	45	C	0641.0	0647.2	9.0	10.0	5.0		
	4995	LEAR	20	GRF	0641.5	0647.1	12.0	11.0			QL=6 ST=2 TYP=2
	9400	TYKW	21	GRF	0643.0	0650.0	50.0	4.0	2.0		
	8800	LEAR	20	GRF	0644.0	0647.0	5.3	8.0			QL=6 ST=2 TYP=2
	4995	ATHN	4	S/F	0644.5	0647.1	5.6	11.0			QL=2 ST=2 TYP=3
	8800	ATHN	4	S/F	0646.1	0647.1	2.4	10.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	0646.5	0647.0	1.5	6.0	2.0		
	9100	GORK	1	S	0646.5	0647.2	1.0	5.4	2.0		
	610	LEAR	47	GB	0648.5	0648.6	.3	420.0			QL=6 ST=2 TYP=5
	2695	LEAR	47	GB	0648.5	0648.6	.1	78.0			QL=6 ST=2 TYP=5
	1415	LEAR	8	S	0648.5	0648.6	.1	5.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0648.5	0648.6	.1	15.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0648.5	0648.6	.1	10.0			QL=6 ST=2 TYP=3
	3750	TYKW	29	PBI	0650.0		40.0	4.0	2.0		
	430	KRAK	8	S	0705.5	0705.7	.4	25.0			
	810	KRAK	8	S	0705.7	0705.8	.5	13.0			
	610	LEAR	49	GB	0705.8	0705.8	.5	790.0			QL=6 ST=2 TYP=6
	410	LEAR	47	GB	0705.8	0705.8	.3	219.0			QL=6 ST=2 TYP=5
	810	KRAK	8	S	0711.6	0711.8	.3	17.0			
	430	KRAK	8	S	0711.7	0711.7	.1	7.0			
	610	LEAR	47	GB	0711.8	0712.0	.3	160.0			QL=6 ST=2 TYP=5
	430	KRAK	8	S	0719.5	0719.5	.3	37.0			
	410	LEAR	8	S	0719.6	0719.8	.5	30.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0719.6	0719.8	.5	16.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0737.5	0737.6	.1	17.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0737.5	0737.6	.1	4.0			QL=6 ST=2 TYP=3
	430	KRAK	8	S	0737.6	0737.7	.2	7.0			
	810	KRAK	8	S	0737.7	0737.7	.1	6.0			
	9400	TYKW	20	GRF	0753.0	0805.0	30.0	6.0	3.0		
	2000	TYKW	45	C	0754.0	0804.6	22.0	7.0	3.0		
	1470	POTS	20	GRF	0754.0	0805.0	21.0	4.0			
	9100	GORK	20	GRF	0754.0	1004.0	246.0D	11.8			
	2950	GORK	20	GRF	0754.3	0806.0	240.0D	7.7			
	3750	TYKW	45	C	0755.0	0800.5	20.0	6.0	3.0		
	410	LEAR	8	S	0755.1	0755.3	.4	16.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0755.1	0755.3	.4	5.0			QL=6 ST=2 TYP=3
	1415	LEAR	20	GRF	0756.3	0802.5	12.7	5.0			QL=6 ST=2 TYP=2
	2695	LEAR	20	GRF	0756.3	0805.6	12.7	11.0			QL=6 ST=2 TYP=2
	4995	LEAR	20	GRF	0756.3	0805.6	15.7	11.0			QL=6 ST=2 TYP=2
	8800	LEAR	20	GRF	0756.3	0805.6	15.7	10.0			QL=6 ST=2 TYP=2
	6100	KISV	1	S	0957.2	0958.0	2.0	3.0			
	6100	KISV	1	S	1102.7	1103.6	2.0	4.0			
	33	UPIC	45	C	1511.5	1511.5	2.8				
	29	UPIC	45	C	1511.5	1513.0	2.5				
	2695	PENT	240	R	1540.0	1550.0	10.0	3.0	1.5		
	2800	OTTA	20	GRF	1600.0	1610.0	80.0	3.0	1.5		
	2800	OTTA	240	R	1748.0	1750.0	2.0	2.4	1.2		
	2800	OTTA	20	GRF	1850.0	1853.0	20.0	2.0	1.0		
	245	SGMR	49	GB	1911.8	1913.0	1.5	500.0			QL=6 ST=2 TYP=6
	2800	OTTA	21	GRF	2030.0		300.0D	14.8			
	2800	OTTA	20	GRF	2047.0	2058.0	135.0	12.4	6.2		
	1000	TYKW	45	C	2103.0	2129.7	75.0	41.0	13.0		
	500	HIRA	24	R	2103.5	2127.3	540.0	100.0	20.0		SL
	610	SGMR	47	GB	2105.5	2120.1	146.6	139.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	2105.6	2152.8	154.4	250.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	2107.6	2157.8	152.4	130.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	2110.6	2114.6	7.0	68.0			QL=6 ST=3 TYP=5
	245	PALE	8	S	2111.6	2112.8	1.5	42.0			QL=6 ST=3 TYP=3
	410	PALE	4	S/F	2112.3	2114.8	5.3	29.0			QL=6 ST=3 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
20	2000	TYKW	20	GRF	2114.0	2130.0	65.0	3.0	1.5		
	3750	TYKW	20	GRF	2115.0	2140.0	90.0	4.0	2.0		
	245	PALE	47	GB	2117.6	2118.3	17.2	47.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	2117.6	2120.1	17.2	93.0			QL=6 ST=2 TYP=5
	410	PALE	20	GRF	2117.6	2120.1	17.2	44.0			QL=6 ST=2 TYP=2
	610	PALE	47	GB	2134.8	2135.0	18.0	150.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2134.8	2137.1	18.0	169.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	2134.8	2150.6	18.0	119.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2152.8	2152.8	11.5	260.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	2152.8	2152.8	11.5	130.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	2152.8	2152.8	11.5	150.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2204.3	2205.3	115.0	219.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2220.1	2225.6	23.7	440.0			QL=6 ST=2 TYP=5
	610	PALE	8	S	2221.8	2223.3	1.7	13.0			QL=6 ST=2 TYP=3
	410	PALE	47	GB	2243.8	2243.8	23.0	130.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2243.8	2247.6	23.0	160.0			QL=6 ST=2 TYP=5
	610	PALE	8	S	2250.8	2252.3	1.7	13.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	2306.8	2319.6	35.7	150.0			QL=6 ST=2 TYP=5
	245	LEAR	20	GRF	2309.0E	0008.6	61.0D	150.0			QL=4 ST=2 TYP=2
	410	SGMR	47	GB	2309.0	2309.1	31.0	55.0			QL=6 ST=2 TYP=5
	245	SGMR	4	S/F	2309.0	2309.1	31.0	110.0			QL=6 ST=2 TYP=3
	610	SGMR	47	GB	2309.0	2310.6		84.0			QL=6 ST=2 TYP=5
	410	LEAR	20	GRF	2309.0E	2316.5	61.0D	70.0			QL=4 ST=2 TYP=2
	610	LEAR	20	GRF	2309.0E	2346.0	61.0D	70.0			QL=4 ST=2 TYP=2
	3750	TYKW	21	GRF	2315.0	0040.0	300.0	10.0	5.0		
	2695	PENT	20	GRF	2315.0	2330.0	35.0	4.6	3.0		
	2000	TYKW	21	GRF	2317.0	0046.0	290.0	6.0	3.0		
	1000	TYKW	45	C	2317.0	0139.4	195.0	43.0	8.0		
	1000	TYKW			2317.0	2336.6		19.0			
	610	PALE	4	S/F	2317.3	2319.3	11.2	25.0			QL=6 ST=2 TYP=3
	3750	TYKW	45	C	2318.0	2326.7	30.0	8.0	3.0		
	2000	TYKW	45	C	2318.0	2329.0	35.0	4.0	2.0		
	9400	TYKW	21	GRF	2320.0	0040.0	240.0	8.0	4.0		
	9400	TYKW	20	GRF	2323.0	2333.0	30.0	5.0	2.0		
	410	PALE	47	GB	2342.5	2342.6	16.6	130.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	2342.5	2346.8	12.3	62.0			QL=6 ST=2 TYP=5
21	245	LEAR	43	NS	0010.0	0140.5	562.0D	260.0			QL=6 ST=2 TYP=1
	100	GORK	44	NS	0300.0E		405.0D		65.0		
	127	TORN	44	NS	0540.0E		600.0D		45.0		V=1
	260	ONDR	44	NS	0600.0E		515.0D	27.0			
	204	IZMI	44	NS	0600.0E		360.0D	80.0			
	245	SGMR	43	NS	0939.0	1306.1	548.5	219.0			QL=6 ST=3 TYP=1
	410	SGMR	43	NS	1525.0	1536.6	55.1	28.0			QL=6 ST=2 TYP=1
	610	SGMR	43	NS	1525.0	1537.1	55.1	32.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1639.0	2254.1	699.0D	189.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	1927.0E	2105.0	850.0D	15.0	5.0		WR
	245	SGMR	43	NS	2017.0	2032.8	15.8D	119.0			QL=6 ST=3 TYP=1
	208	VORO	44	NS	2100.0E		360.0D				
	245	LEAR	43	NS	2309.0	0311.1	623.0D	49.0			QL=6 ST=2 TYP=1
	245	PALE	47	GB	0004.6	0004.8	14.5	100.0			QL=6 ST=2 TYP=5
	410	PALE	8	S	0006.0	0006.6	.8	16.0			QL=6 ST=2 TYP=3
	610	LEAR	4	S/F	0011.0	0012.3	3.6	20.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0013.8	0014.1	.7	160.0			QL=6 ST=2 TYP=5
	410	LEAR	8	S	0013.8	0014.1	.7	20.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0016.0	0018.0	10.0	1.5	0.5		
	4995	PALE	8	S	0017.6	0017.8	1.5	11.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	0019.1	0020.3	11.4	98.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	0036.8	0039.1	3.3	89.0			QL=6 ST=2 TYP=5
	3750	TYKW	20	GRF	0117.0	0137.0	80.0	2.0	1.0		
	610	PALE	47	GB	0126.5	0132.6	21.8	74.0			QL=6 ST=2 TYP=5
	410	PALE	8	S	0133.1	0133.1	.2	17.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	0138.1	0140.6	8.5	260.0			QL=6 ST=2 TYP=5
	610	LEAR	8	S	0146.8	0147.8	1.8	37.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0147.1	0147.1	.4	33.0			QL=6 ST=2 TYP=3
	610	PALE	47	GB	0150.1	0150.1	.4	74.0			QL=6 ST=2 TYP=5
	15400	PALE	8	S	0150.1	0150.3	.4	24.0			QL=6 ST=2 TYP=3
	610	PALE	47	GB	0152.1	0152.3	7.2	74.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	0154.5	0155.5	1.3	60.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	0154.8	0155.0	.3	160.0			QL=6 ST=2 TYP=5
	610	LEAR	47	GB	0220.8	0224.5	10.0	50.0			QL=5 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
21	610	PALE	47	GB	0223.8	0223.8	2.0	55.0			QL=6 ST=2 TYP=5
	245	LEAR	4	S/F	0223.8	0224.8	3.0	40.0			QL=5 ST=2 TYP=3
	410	PALE	47	GB	0224.1	0225.1	6.2	50.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	0224.3	0225.1	6.8	55.0			QL=5 ST=2 TYP=5
	410	PALE	4	S/F	0232.3	0235.6	5.8	30.0			QL=6 ST=2 TYP=3
	610	PALE	47	GB	0233.6	0234.1	2.7	50.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0255.0	0337.6	145.0	41.0	9.0		
	3750	TYKW	5	S	0258.0	0258.2	1.0	3.0	1.0		
	9100	GORK	20	GRF	0301.2E	0304.0U	76.0D	166.0			
	2950	GORK	20	GRF	0301.3E	0305.0	360.0D	12.4			
	650	GORK	21	GRF	0301.5E		302.9D	13.0			
	950	GORK	22	GRF	0309.0E	0336.9	129.0D	44.0			
	650	GORK	40	F	0313.3	0346.3	106.3	134.0			
	610	PALE	47	GB	0315.5	0318.1	15.6	79.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	0331.1	0336.3	26.0	93.0			QL=6 ST=2 TYP=5
	410	PALE	8	S	0343.8	0344.0	.3	17.0			QL=6 ST=2 TYP=3
	610	LEAR	47	GB	0345.8	0346.1	1.0	139.0			QL=5 ST=3 TYP=5
	245	LEAR	8	S	0345.8	0346.3	1.0	38.0			QL=5 ST=2 TYP=3
	1415	ATHN	4	S/F	0349.3	0353.6	8.7	10.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	0349.3	0353.6	8.7	8.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	0349.3	0353.6	8.7	10.0			QL=2 ST=2 TYP=3
	8800	ATHN	4	S/F	0349.3	0353.6	8.7	13.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0352.1	0352.3	.5	110.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	0352.1	0352.3	.5	119.0			QL=6 ST=2 TYP=5
	410	LEAR	8	S	0352.1	0352.3	.4	38.0			QL=6 ST=2 TYP=3
	610	LEAR	47	GB	0353.3	0355.0	2.0	70.0			QL=6 ST=2 TYP=5
	410	PALE	8	S	0357.1	0358.0	1.0	17.0			QL=6 ST=2 TYP=3
	610	PALE	47	GB	0357.1	0358.0	9.7	130.0			QL=6 ST=2 TYP=5
	1415	ATHN	20	GRF	0424.8	0431.3	19.3	10.0			QL=6 ST=2 TYP=2
	2695	ATHN	20	GRF	0424.8	0431.3	19.0	11.0			QL=6 ST=2 TYP=2
	4995	ATHN	20	GRF	0424.8	0431.3	15.7	8.0			QL=2 ST=2 TYP=2
	8800	ATHN	20	GRF	0424.8	0431.3	15.7	13.0			QL=6 ST=2 TYP=2
	3750	TYKW	20	GRF	0445.0	0545.0	170.0	4.0	2.0		
	2000	TYKW	20	GRF	0448.0	0545.0	155.0	3.0	1.5		
	9100	GORK	20	GRF	0450.5	0514.2	74.5	11.0			
	6100	KISV	1	S	0512.6	0514.3	6.0	4.0			
	536	ONDR	41	F	0740.0	0759.0	40.0	21.0			
	100	HIRA	46	C	0752.3	0752.8	1.2	380.0	220.0		
	100	GORK	46	C	0752.4	0752.9	2.3	220.0D			
	33	UPIC	45	C	0752.9	0753.5	3.4				
	430	KRAK	8	S	0915.7	0915.8	.2	34.0			
	430	KRAK	8	S	1014.4	1014.6	.3	42.0			
	430	KRAK	27	RF	1020.7	1032.5	19.0	15.0	3.0		
	2800	OTTA	20	GRF	1100.0	1115.0	40.0	3.2	1.6		
	430	KRAK	27	RF	1200.5	1209.0	23.5	14.0	6.0		
	2800	OTTA	20	GRF	1233.0	1235.0	15.0	2.0	1.0		
	9500	POTS	20	GRF	1337.0	1342.8	18.0	6.0			
	2800	OTTA	21	GRF	1337.0	1345.0	35.0	3.2	1.6		
	4995	ATHN	20	GRF	1339.3	1342.8	8.3	11.0			QL=2 ST=2 TYP=2
	6100	KISV	2	S/F	1339.5	1345.0	7.5	5.0			
	2800	OTTA	2	S/F	1340.0	1342.0	9.0	6.6	3.2		
	3000	POTS	20	GRF	1340.0	1344.4	15.0	9.0			
	2695	ATHN	20	GRF	1340.6	1342.1	6.0	11.0			QL=6 ST=2 TYP=2
	1470	POTS	20	GRF	1341.0	1342.4	14.0	2.0			
	536	ONDR	46	C	1448.0	1450.0	12.0	21.0	6.0		
	245	SGMR	47	GB	1448.1	1449.0	1.7	64.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	1448.1	1449.0	3.9	58.0			QL=6 ST=2 TYP=5
	610	SGMR	4	S/F	1448.6	1450.1	2.9	39.0			QL=6 ST=2 TYP=3
	2800	OTTA	22	GRF	1720.0	1728.0	30.0	3.2	1.5		
	2800	OTTA	22	GRF	1910.0	1915.0	20.0	2.0	1.0		
	2800	OTTA	22	GRF	1945.0	1958.0	25.0	3.8	1.4		
	500	HIRA	24	R	2004.0	2152.8	300.0	15.0	3.0		SL
	200	HIRA	46	C	2030.0	2031.7	2.7	205.0	47.0		0
	2800	OTTA	1	S	2031.0	2032.0	5.0	2.6	1.4		
	245	PALE	47	GB	2031.6	2032.8	1.2	160.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	2056.3	2056.8	.7	58.0			QL=6 ST=2 TYP=5
	2800	OTTA	21	GRF	2125.0	2200.0	140.0	4.8	2.2		
	1000	TYKW	20	GRF	2125.0	2200.0	140.0	4.0	2.0		
	3750	TYKW	21	GRF	2125.0	2200.0	140.0	4.0	2.0		
	2000	TYKW	21	GRF	2125.0	2201.0	130.0	4.0	2.0		
	3750	TYKW	5	S	2127.0	2129.0	10.0	5.0	2.0		

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
21	2800	OTTA	20	GRF	2127.0	2129.5	13.0	6.0	2.0		
	2000	TYKW	5	S	2127.0	2130.0	7.0	2.0	0.7		
	3750	TYKW	5	S	2225.0	2227.0	15.0	1.5	0.5		
	245	SGMR	8	S	2243.1	2243.3	.5	48.0			QL=6 ST=2 TYP=3
	200	HIRA	46	C	2253.3	2254.0	1.3	360.0	85.0		0
	208	VORO	4	S/F	2254.0	2255.0	2.0	200.0			
	9400	TYKW	5	S	2359.0	2359.3	2.0	18.0	3.0		
22	100	HIRA	43	NS	0040.0	0426.0	530.0D	40.0	7.0		
	100	GORK	44	NS	0400.0E		351.0D		10.0		
	127	TORN	44	NS	0540.0E	0839.7	600.0D	60.0	209.0		V=1
	204	IZMI	44	NS	1005.0E		115.0D	50.0			
	245	SGMR	43	NS	1059.0	1114.6	762.0D	139.0			QL=6 ST=2 TYP=1
	100	HIRA	44	NS	1926.0E	2010.0	490.0D	1000.0	300.0		SR
	200	HIRA	44	NS	1926.0E	2030.0	850.0D	80.0	25.0		SR
	208	VORO	44	NS	2100.0E		360.0D		26.0		
	3750	TYKW	5	S	0049.0	0049.3	2.0	1.0	0.3		
	3750	TYKW	21	GRF	0130.0	0200.0	80.0	2.0	1.0		
	3750	TYKW	5	S	0231.0	0232.3	11.0	5.0	2.0		
	3750	TYKW	45	C	0333.0	0337.4	18.0	73.0	10.0		
	3653	YUNN	3	S	0334.0	0337.5	15.0	91.0			
	2000	TYKW	45	C	0334.0	0337.6	6.0	20.0	5.0		
	2950	GORK	21	GRF	0334.2	0339.4	16.5	9.5			
	2950	GORK	4	S/F	0334.7	0337.5	3.6	34.0			
	2902	YUNN	3	S	0335.0	0337.8	13.0	50.0			
	9100	GORK	21	GRF	0335.5	0338.5	18.5	9.4			
	1000	TYKW	45	C	0335.7	0337.5	4.0	18.0	2.5		
	2695	LEAR	4	S/F	0335.8	0337.6	4.2	30.0			QL=5 ST=2 TYP=3
	1415	LEAR	4	S/F	0335.8	0337.6	2.7	16.0			QL=5 ST=2 TYP=3
	4995	LEAR	47	GB	0335.8	0337.6	4.7	75.0			QL=5 ST=2 TYP=5
	950	GORK	2	S/F	0335.9	0336.3	.9	9.0			
	9400	TYKW	5	S	0336.0	0337.5	4.0	20.0	6.0		
	650	GORK	4	S/F	0336.0	0337.3	2.3	25.0			
	610	LEAR	47	GB	0336.0	0337.3	2.5	61.0			QL=5 ST=2 TYP=5
	500	HIRA	45	C	0336.6	0337.0	1.6	30.0	15.0		WR
	4995	PALE	47	GB	0337.0	0337.5		68.0			QL=6 ST=1 TYP=5
	950	GORK	2	S/F	0337.0	0337.5	1.5	9.6			
	8800	LEAR	4	S/F	0337.0	0337.5	3.5	23.0			QL=5 ST=2 TYP=3
	9100	GORK	2	S/F	0337.0	0337.6	1.4	20.0			
	410	LEAR	47	GB	0337.1	0337.3	1.4	63.0			QL=5 ST=2 TYP=5
	410	PALE	8	S	0337.3	0337.3		27.0			QL=6 ST=1 TYP=3
	2000	TYKW	30	PBI	0340.0		100.0	3.0	1.0		
	9400	TYKW	29	PBI	0340.0		40.0	4.0	2.0		
	3750	TYKW	30	PBI	0351.0		110.0	2.0	1.0		
	2902	YUNN	24	R	0355.0	0359.0	59.0	9.0			
	3750	TYKW	5	S	0356.0	0359.0	25.0	2.0	1.0		
	2950	GORK	20	GRF	0356.5	0438.4	71.8	4.7			
	200	HIRA	8	S	0425.3	0425.6	.4	225.0			SR
	2000	TYKW	20	GRF	0430.0	0438.0	40.0	2.0	1.0		
	9400	TYKW	20	GRF	0443.0	0455.0	35.0	2.0	1.0		
	3750	TYKW	5	S	0443.5	0444.0	4.0	2.0	.7		
	6100	KISV	1	S	0443.6	0444.4	3.5	3.0			
	610	LEAR	8	S	0814.6	0815.0	.5	47.0			QL=6 ST=2 TYP=3
	2950	GORK	21	GRF	0839.5	0916.5	66.0D	9.5			
	430	KRAK	21	GRF	0908.5	0914.0	14.2	14.0	7.0		
	3000	POTS	23	GRF	0910.0	0912.7	20.0	20.0			
	430	KRAK	8	S	0910.8	0911.0	.5	17.0			
	2950	GORK	2	S/F	0910.8	0912.8	5.5	17.0			
	6100	KISV	45	C	0910.8	0912.8	6.0	25.0			
	6100	KISV			0910.8	0914.7		22.0			
	3653	YUNN	5	S	0911.0	0912.5	6.0	27.0			
	1470	POTS	23	GRF	0911.0	0912.7	19.0	14.0			
	260	ONDR	8	S	0911.0	0911.0	1.0	125.0			
	204	IZMI	5	S	0911.0	0911.2	.6	180.0D			
	610	LEAR	8	S	0911.1	0911.1	.2	31.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0911.1	0911.3	.5	160.0			QL=6 ST=2 TYP=5
	410	LEAR	8	S	0911.1	0911.3	.4	11.0			QL=6 ST=2 TYP=3
	950	GORK	1	S	0911.1	0912.7	2.9	26.0			
	810	KRAK	8	S	0911.2	0911.2	.1	6.0			
	650	GORK	41	F	0911.2	0912.7	3.2	46.0			
	9500	POTS	21	GRF	0912.0	0912.7	18.0	15.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean	Int	Remarks
22	2650	DWIN	2	S/F	0912.0	0913.0	5.0	20.0	10.0		
	8800	LEAR	8	S	0912.1	0912.5	1.0	20.0			QL=6 ST=2 TYP=3
	1415	LEAR	8	S	0912.1	0912.6	1.0	15.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0912.1	0912.6	.9	20.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	0912.1	0912.6	1.0	26.0			QL=6 ST=2 TYP=3
	9100	GORK	21	GRF	0912.1	0913.1	13.0	95.0			
	810	KRAK	8	S	0912.3	0912.5	.3	6.0			
	610	LEAR	47	GB	0912.3	0913.1	2.5	95.0			QL=6 ST=2 TYP=5
	9100	GORK	3	S	0912.4	0912.7	.8	15.0	7.5		
	6100	KISV	29	PBI	0916.5	0916.5	21.0	8.0			
	260	ONDR	8	S	0921.0	0921.0	1.0	84.0			
	430	KRAK	21	GRF	0924.3	0927.0	10.0	8.0	4.0		
	430	KRAK	8	S	0928.5	0928.5	.1	10.0			
	536	ONDR	46	C	0947.0		13.0		13.0		
	536	ONDR			0947.0	0949.0		31.0			
	536	ONDR			0947.0	0952.0		20.0			
	536	ONDR			0947.0	0955.0		8.0			
	260	ONDR	28	PRE	1013.0		19.0	64.0	26.0		
	810	KRAK	8	S	1021.3U	1021.5	.3U	28.0U			
	245	SGMR	47	GB	1023.5	1050.0	35.6	180.0			QL=6 ST=2 TYP=5
	610	SGMR	4	S/F	1025.0	1036.0	39.5	45.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	1025.0	1037.0	42.5	59.0			QL=6 ST=2 TYP=5
	536	ONDR	46	C	1028.0	1035.5	23.0	21.0	18.0		
	430	KRAK	48	C	1028.0	1036.0	30.5	70.0	23.0		
	430	KRAK			1028.0	1044.3		49.0			
	260	ONDR	46	C	1032.0	1042.5	20.0	168.0	120.0		
	260	ONDR	29	PBI	1052.0		88.0	84.0	75.0		
	2800	OTTA	20	GRF	1115.0	1235.0	120.0	5.8	3.2		
	6100	KISV			1219.1	1220.0		6.0			
	6100	KISV	45	C	1219.1	1223.8	15.0	16.0			
	1415	ATHN	4	S/F	1221.0	1225.1	9.8	7.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	1222.3	1223.8	5.0	21.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	1222.3	1224.6	7.7	2.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	1355.7	1356.0	1.5	6.4	3.1		
	6100	KISV	1	S	1355.9	1356.2	2.5	4.0			
	930	BORD	8	S	1425.6	1425.7	.1	16.0	1.0		
	2800	OTTA	22	GRF	1445.0	1500.0	30.0	3.2	2.1		
	2800	OTTA	20	GRF	1540.0	1542.0	25.0	2.2	1.1		
	2800	OTTA	260	FAL	1620.0	1700.0	40.0	-3.2	-1.6		
	2800	OTTA	20	GRF	1850.0	2110.0	245.0	4.2	2.1		
	245	PALE	47	GB	2007.5	2007.6	.6	100.0			QL=6 ST=2 TYP=5
	9400	HUAN	2	S/F	2027.4	2031.1	4.6	10.0	3.6		0
	245	LEAR	8	S	2315.1	2315.1	.2	42.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	2315.1	2315.1	.2	3.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	2318.8	2319.8	2.0	18.0			QL=5 ST=2 TYP=3
	15400	LEAR	4	S/F	2318.8	2320.0	2.5	40.0			QL=5 ST=2 TYP=3
	3750	TYKW	21	GRF	2319.0	0025.0	190.0	4.0	2.0		
	3750	TYKW	5	S	2319.0	2319.8	2.0	6.0	2.0		
	9400	TYKW	5	S	2319.0	2319.8	1.5	8.0	3.0		
	8800	LEAR	8	S	2319.3	2319.8	.8	21.0			QL=5 ST=2 TYP=3
	9400	TYKW	29	PBI	2320.5		30.0	2.0	1.0		
	3750	TYKW	29	PBI	2321.0		30.0	2.0	1.0		
	245	LEAR	8	S	2341.3	2341.5	.3	27.0			QL=6 ST=2 TYP=3
23	100	GORK	44	NS	0300.0E		540.0D	5.0			
	260	ONDR	44	NS	0548.0E		452.0D	30.0			
	127	TORN	44	NS	0600.0E		530.0D				V=2
	245	PALE	43	NS	2041.0	2053.3	21.5	57.0			QL=5 ST=2 TYP=1
	245	SGMR	43	NS	2311.6	2338.5	30.4D	180.0			QL=6 ST=2 TYP=1
	3750	TYKW	20	GRF	0125.0	0145.0	60.0	2.0	1.0		
	4995	ATHN	49	GB	0243.0	0837.1	354.1D				QL=2 ST=2 TYP=7
	650	GORK	20	GRF	0416.8	0654.0	386.9	11.0			
	3750	TYKW	21	GRF	0505.0	0610.0	160.0	2.0	1.0		
	3750	TYKW	5	S	0543.0	0544.4	6.0	2.0	0.5		
	410	LEAR	47	GB	0744.3	0744.6	.5	74.0			QL=6 ST=2 TYP=5
	610	LEAR	8	S	0744.3	0744.6	.3	9.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	0837.1	0840.6	7.9	26.0			QL=2 ST=3 TYP=3
	2695	ATHN	20	GRF	0837.1	0840.6	7.9	8.0			QL=6 ST=3 TYP=2
	6100	KISV	3	S	0837.6	0840.6	5.0	19.0			
	2950	GORK	22	GRF	0839.0	0840.7	21.7	10.0			
	2695	LEAR	4	S/F	0839.8	0840.6	5.0	11.0			QL=6 ST=2 TYP=3

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean	Int	Remarks
23	4995	LEAR	4	S/F	0839.8	0840.6	5.0	28.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0840.0	0840.7	5.0	14.0	4.0		
	3750	TYKW	29	PBI	0845.0		25.0U	2.0	1.0U		
	113	POTS	4	S/F	0845.2	0845.6	1.1	150.0	15.0		
	2800	OTTA	27A	RF	1230.0		85.0	3.0	2.4		
	2800	OTTA	24	R	1230.0	1255.0	25.0	3.0	1.5		
	2800	OTTA	24P	R	1255.0		50.0	3.0			
	6100	KISV	1	S	1300.7	1301.0	1.0	4.0			
	2800	OTTA	1	S	1322.0	1323.0	3.0	2.8	1.3		
	2800	OTTA	26	FAL	1345.0	1355.0	10.0	-3.0	-1.5		
	2800	OTTA	21	GRF	1710.0	1845.0	220.0	4.0	2.2		
	2800	OTTA	3	S	1816.0	1816.9	4.0	12.0	4.0		
	4995	PALE	8	S	1816.6	1816.8	.7	17.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1816.6	1816.8	.7	21.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1816.6	1816.8	.7	18.0			QL=6 ST=2 TYP=3
24	100	GORK	44	NS	0257.0E		546.0D		5.0		
	127	TORN	43	NS	0725.0	0910.7	155.0	10.0			V=1
	2695	PENT	20	GRF	0005.0	0020.0	40.0	2.4	1.8		
	3750	TYKW	21	GRF	0010.0	0018.0	45.0	2.0	1.0		
	3750	TYKW	5	S	0029.0	0033.2	14.0	2.0	1.0		
	500	HIRA	27	RF	0040.0	0141.8	75.0	4.0	1.0		MR
	3750	TYKW	20	GRF	0124.0	0131.0	45.0	2.0	1.0		
	245	LEAR	47	GB	0401.5	0401.6	1.0	61.0			QL=6 ST=2 TYP=5
	3750	TYKW	20	GRF	0530.0	0604.0	135.0	4.0	2.0		
	430	KRAK	8	S	0842.9	0843.0	.2	15.0			
	3100	CRIM	26	FAL	0930.0	1100.0		9.0			
	930	BORD	41	F	1007.1	1007.2	.2	17.0	2.0		
	430	KRAK	8	S	1041.5	1041.7	.5	31.0			
	29	UPIC	45	C	1202.1	1203.4	2.3				
	33	UPIC	45	C	1202.5	1204.2	2.2				
	930	BORD	8	S	1501.7	1501.7	.1	72.0	1.0		
	2695	PENT	20	GRF	1517.0	1520.0	20.0	2.2	1.0		
	4995	ATHN	20	GRF	1554.3	1602.8	14.0	11.0			QL=2 ST=2 TYP=2
	245	SGMR	47	GB	1559.8	1601.8	3.8	130.0			QL=6 ST=2 TYP=5
	2695	ATHN	4	S/F	1601.3	1602.3	2.7	11.0			QL=6 ST=2 TYP=3
	930	BORD	3	S	1601.3	1602.3	4.0	19.0	9.0		
	4995	SGMR	4	S/F	1601.5	1602.6	3.1	11.0			QL=6 ST=2 TYP=3
	2800	PENT	2	S/F	1601.6	1602.0	3.0	8.8	4.4		
	1415	ATHN	4	S/F	1601.6	1602.3	3.9	13.0			QL=6 ST=2 TYP=3
	8800	SGMR	4	S/F	1601.6	1602.8	2.9	15.0			QL=6 ST=2 TYP=3
	1415	SGMR	8	S	1601.8	1602.1	2.0	35.0			QL=6 ST=2 TYP=3
	610	SGMR	8	S	1601.8	1602.5	.8	22.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	1602.6	1603.3	3.0	17.0			QL=6 ST=2 TYP=3
	2800	OTTA	20	GRF	1907.0	1920.0	45.0	2.4	1.2		
	200	HIRA	46	C	2040.0	2040.2	1.8	125.0	5.0		0
	245	PALE	47	GB	2040.1	2040.3	.5	68.0			QL=6 ST=2 TYP=5
	2800	OTTA	1	S	2047.0	2047.2	3.0	2.2	1.0		
	3750	TYKW	20	GRF	2205.0	2230.0	90.0	2.0	1.0		
	245	LEAR	8	S	2324.0	2324.1	.6	27.0			QL=6 ST=2 TYP=3
25	260	ONDR	44	NS	0559.0E		491.0D	35.0			
	2695	PENT	20	GRF	0040.0	0045.0	35.0	2.0	1.0		
	2000	TYKW	20	GRF	0040.0	0046.0	35.0	2.0	1.0		
	3750	TYKW	20	GRF	0040.0	0104.0	120.0	2.0	1.0		
	2000	TYKW	20	GRF	0141.0	0145.5	35.0	2.0	0.7		
	100	GORK	46	C	0309.4	0309.9	1.8	25.0D			
	100	GORK			0309.4	0310.3		25.0D			
	2950	GORK	23	GRF	0315.0E	0912.3	525.0D	10.0			
	3750	TYKW	45	C	0355.0	0358.2	5.0	9.0	4.0		
	2902	YUNN	3	S	0355.0	0358.2	9.8	36.0			
	2000	TYKW	45	C	0355.0	0358.3	5.0	9.0	4.0		
	2950	GORK	2	S/F	0355.4	0358.0	6.2	9.0			
	3653	YUNN	3	S	0355.4	0358.2	9.8	15.0			
	9400	TYKW	20	GRF	0356.0	0358.0	35.0	3.0	1.5		
	2000	TYKW	29	PBI	0400.0		40.0	2.0	1.0		
	3750	TYKW	29	PBI	0400.0		60.0	3.0	1.0		
	410	LEAR	8	S	0438.8	0439.1	.5	13.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0439.0	0439.1	.1	5.0			QL=6 ST=2 TYP=3
	3750	TYKW	20	GRF	0530.0	0537.0	50.0	2.0	1.0		
	2950	GORK	4	S/F	0602.6	0606.1	4.0	24.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
25	2950	GORK	45	C	0611.9	0612.5	6.0	24.0			
	2950	GORK			0611.9	0614.6		55.0			
	2000	TYKW	21	GRF	0651.0	0658.0	40.0	2.0	1.0		
	3750	TYKW	5	S	0652.0	0653.3	3.0	4.0	1.5		
	2000	TYKW	5	S	0652.0	0653.3	3.0	4.0	1.5		
	3100	CRIM	1	S	0652.0	0653.4	3.0	6.0	2.0		
	2950	GORK	4	S/F	0701.0	0703.6	4.5	24.0			
	430	KRAK	42	SER	0725.5	0725.7	6.7	27.0			
	245	LEAR	8	S	0813.0	0813.1	.3	30.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0813.1	0813.1	.2	10.0			QL=6 ST=2 TYP=3
	6100	KISV	1	S	0831.2	0831.6	1.5	3.0			
	6100	KISV	20	GRF	0857.0	0910.5	23.5	4.0			
	9100	GORK	20	GRF	0903.7	0911.3	12.5	7.0			
	204	IZMI	41	F	0925.0	0925.5	3.5	67.0			
	430	KRAK	8	S	0925.8	0926.0	.7	15.0			
	33	UPIC	42	SER	0926.5	0953.3	55.0				
	29	UPIC	42	SER	0927.0	0953.5	54.1				
	430	KRAK	8	S	0946.7	0947.2	1.0	17.0			
	536	ONDR	41	F	0948.0	0949.0	6.0	28.0			
	6100	KISV			0948.5	0949.9		7.0			
	950	GORK	46	C	0948.5	0952.0	5.4	27.0			
	6100	KISV	46	C	0948.5	0952.5	6.5	41.0			
	3000	POTS	4	S/F	0948.5	0952.5	5.5	22.0			
	3100	CRIM	40	F	0948.5	0952.8	6.0	16.0	5.0		
	650	GORK	4	S/F	0948.5	0953.2	7.1	27.0			
	950	GORK			0948.5	0953.3		44.0			
	6100	KISV			0948.5	0953.3		31.0			
	1470	POTS	4	S/F	0948.5	0953.5	7.5	35.0			
	2950	GORK	4	S/F	0948.6	0952.5	6.0	21.0			
	810	KRAK	7	C	0948.8	0953.2	6.0	32.0	9.0		
	3100	BERN	4	S/F	0949.0	0952.5	7.0	33.0			
	8400	BERN	4	S/F	0949.0	0952.6	7.0	118.0			
	19600	BERN	4	S/F	0949.0	0952.6	7.0	113.0			
	11800	BERN	4	S/F	0949.0	0952.6	7.0	163.0			
	5200	BERN	4	S/F	0949.0	0952.6	7.0	74.0			
	808	ONDR	40	F	0949.0	0953.5	6.0	37.0			
	430	KRAK	41	F	0949.0	0954.0	6.5	9.0	4.0		
	9100	GORK	46	C	0949.8	0952.6	5.3	96.0			
	9100	GORK			0949.8	0953.3		72.0			
	9500	POTS	4	S/F	0950.0	0952.5	5.0	102.0			
	204	IZMI	41	F	0950.0	0956.2	9.0	200.0			
	113	POTS	42	SER	0950.0	0959.5	16.0	800.0	15.0		III
	100	GORK	46	C	0950.1	0950.4	13.4	20.00			
	100	GORK			0950.1	0959.5		1600.0			
	35000	BERN	4	S/F	0952.0	0952.6	7.0	60.0			
	650	GORK	29	PBI	0953.9	0954.0	5.9	5.0			
	127	TORN	47	GB	0955.4	0959.4	6.0	830.0	130.0		
	2800	OTTA	20	GRF	1120.0	1205.0	115.0	3.8	1.6		
	2800	OTTA	21	GRF	1450.0	1455.0	85.0	3.2	1.6		
	3000	POTS	1	S	1452.5	1454.0	2.5	15.5			
	1470	POTS	1	S	1452.5	1454.0	2.5	3.0			
	2800	OTTA	1	S	1453.0	1454.0	2.0	2.2	1.4		
	2800	OTTA	20	GRF	1815.0	1822.0	35.0	2.0	1.0		
	2800	OTTA	22	GRF	1903.0	1912.0	37.0	3.0	1.2		
	245	PALE	47	GB	2101.6	2101.8	.5	62.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	2101.6	2101.8	.5	57.0			QL=6 ST=2 TYP=5
	3750	TYKW	5	S	2114.0	2119.0	15.0	2.0	0.7		
	245	PALE	8	S	2123.8	2123.8	.3	22.0			QL=6 ST=2 TYP=3
	208	VORO	4	S/F	2153.0	2155.0	4.0	300.00			
	500	HIRA	7	C	2153.6	2154.0	2.5	25.0	8.0		ML
	245	SGMR	49	GB	2154.1	2154.6	2.4	570.0			QL=6 ST=2 TYP=6
	245	PALE	49	GB	2154.3	2154.6	2.2	620.0			QL=6 ST=2 TYP=6
	200	HIRA	8	S	2154.4	2154.5	.5	315.0			0
	410	PALE	47	GB	2154.5	2154.8	.8	119.0			QL=6 ST=2 TYP=5
	410	SGMR	8	S	2154.5	2154.8	1.1	47.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	2200.0	2203.5	20.0	2.0	1.0		
	9400	TYKW	5	S	2208.0	2210.0	12.0	6.0	3.0		
	9400	TYKW	31	ABS	2220.0	2240.0	100.0	-4.0	-2.0		
	3750	TYKW	31	ABS	2220.0	2344.0	91.0	-3.0	-1.5		
	2000	TYKW	32	ABS	2223.0	2354.0	131.00	-2.0	-1.0		
	500	HIRA	7	C	2322.3	2322.5	4.0	45.0	5.0		0

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25	1000	TYKW	5	S	2323.0	2325.7	9.0	6.0	2.0		
	2000	TYKW	45	C	2323.5	2325.7	6.0	14.0	5.0		
	3750	TYKW	45	C	2324.0	2325.6	6.0	41.0	12.0		
	9400	TYKW	45	C	2324.0	2325.6	4.0	80.0	25.0		
	2695	PENT	3	S	2324.0	2325.8	6.0	22.0	8.4		
	4995	PALE	47	GB	2324.6	2325.6	2.2	55.0			QL=6 ST=2 TYP=5
	17000	NOBE	1	S	2324.6	2325.6	4.0	34.0			0
	8800	PALE	47	GB	2324.8	2325.5	2.3	81.0			QL=6 ST=2 TYP=5
	15400	PALE	8	S	2325.3	2325.6	1.3	42.0			QL=6 ST=2 TYP=3
	410	PALE	8	S	2325.3	2326.5	1.3	21.0			QL=6 ST=2 TYP=3
	9400	TYKW	29	PBI	2328.0		10.0	4.0	2.0		
	245	PALE	8	S	2328.3	2328.8	.7	26.0			QL=6 ST=2 TYP=3
	410	PALE	8	S	2336.0	2336.1	.3	19.0			QL=6 ST=2 TYP=3
	2695	PENT	20	GRF	2347.0	2349.0	105.0	3.2	1.6		
	2000	TYKW	5	S	2348.0	2348.8	3.0	2.0	0.7		
	3750	TYKW	5	S	2348.0	2348.8	3.0	3.0	1.0		
	245	PALE	8	S	2351.6	2351.8	1.9	44.0			QL=6 ST=2 TYP=3
	3750	TYKW	20	GRF	2353.0	0005.0	85.0	2.0	1.0		
	410	PALE	8	S	2355.0	2355.1	.3	21.0			QL=6 ST=2 TYP=3
26	245	PALE	47	GB	0046.8	0047.0	.5	67.0			QL=6 ST=2 TYP=5
	500	HIRA	7	C	0340.2	0340.3	1.0	10.0	4.0		0
	2000	TYKW	20	GRF	0432.0	0452.0	50.0	3.0	1.0		
	3750	TYKW	20	GRF	0443.0	0452.0	75.0	5.0	2.0		
	9400	TYKW	20	GRF	0445.0	0455.0	65.0	2.0	1.0		
	245	LEAR	8	S	0523.5	0523.6	.1	24.0			QL=5 ST=2 TYP=3
	430	KRAK	8	S	1032.0	1032.2	.3	14.0			
	810	KRAK	8	S	1032.2	1032.2	.1	5.0			
	430	KRAK	8	S	1037.8	1037.8	.2	11.0			
	2800	OTTA	20	GRF	1240.0	1310.0	55.0	2.0	1.0		
	245	SGMR	8	S	1639.1	1640.1	1.2	26.0			QL=6 ST=2 TYP=3
	245	SGMR	8	S	1756.1	1756.1	.4	26.0			QL=6 ST=2 TYP=3
	2800	OTTA	20	GRF	2010.0	2025.0	50.0	2.6	1.8		
	2930	VORO	45	C	2320.0	2327.0	15.0	223.0			
	245	LEAR	47	GB	2357.0	2357.1	1.1	62.0			QL=5 ST=2 TYP=5
27	260	ONDR	44	NS	0540.0E		495.0D	33.0			
	245	LEAR	44	NS	2312.0E	2331.1	37.3D	13.0			QL=6 ST=2 TYP=1
	245	LEAR	8	S	0314.5	0314.6	.5	31.0			QL=6 ST=2 TYP=3
	650	GORK	20	GRF	0542.0	0615.0	53.0	6.5			
	245	LEAR	8	S	0704.0	0704.1	.1	13.0			QL=6 ST=2 TYP=3
	536	ONDR	8	S	0757.0	0757.0	1.0	14.0			
	245	LEAR	8	S	0858.6	0858.6	.2	10.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0859.3	0859.5	.3	10.0			QL=6 ST=2 TYP=3
	6100	KISV	2	S/F	1105.6	1106.1	1.0	4.0			
	810	KRAK	2	S/F	1146.0	1146.0	1.0	56.0	5.0		
	430	KRAK	42	SER	1146.3	1147.0	1.5	14.0			
	610	SGMR	47	GB	1146.8	1146.8	.5	75.0			QL=6 ST=2 TYP=5
	410	SGMR	8	S	1146.8	1146.8	1.2	40.0			QL=6 ST=2 TYP=3
	536	ONDR	41	F	1147.0	1147.5	1.0	45.0			
	245	SGMR	8	S	1416.3	1416.5	.7	37.0			QL=6 ST=2 TYP=3
	245	SGMR	8	S	1429.8	1430.1	.8	53.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1430.1	1430.6	2.0	13.0			QL=6 ST=2 TYP=3
	15400	SGMR	8	S	1611.3	1612.3	1.8	29.0			QL=6 ST=2 TYP=3
	2800	OTTA	240	R	1650.0	1657.0	7.0	1.4	.7		
	2800	OTTA	240	R	1745.0	1755.0	10.0	2.0	1.0		
	200	HIRA	42	SER	2047.0	2047.1	2.7	170.0			0
	100	HIRA	46	C	2116.7	2117.0	.8	160.0	43.0		
	500	HIRA	7	C	2125.7	2126.5	3.0	20.0	7.0		0
	2695	PENT	240	R	2150.0	2245.0	55.0	2.4	.8		
	2695	SGMR	4	S/F	2302.8	2305.6	3.2	21.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	2307.3	2307.3	.3	17.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	2342.0	2344.4	4.0	42.0	6.0		
	500	HIRA	42	SER	2346.4	2346.9	11.0	13.0			0
	2695	PENT	20	GRF	2350.0		115.0D	7.4			
	610	LEAR	4	S/F	2354.5	2357.1	3.8	34.0			QL=6 ST=2 TYP=3
28	410	LEAR	43	NS	0255.0	0336.3	155.0	30.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	0255.0	0400.8	155.0	32.0			QL=6 ST=2 TYP=1
	260	ONDR	44	NS	0620.0E		467.0D	20.0			
	9400	TYKW	20	GRF	0020.0	0200.0	220.0	10.0	5.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
28	3750	TYKW	20	GRF	0020.0	0200.0	240.0	9.0	4.0		
	2000	TYKW	20	GRF	0040.0	0140.0	160.0	2.0	1.0		
	245	LEAR	4	S/F	0132.6	0132.6	2.2	11.0			QL=6 ST=2 TYP=3
	9400	TYKW	20	GRF	0430.0	0500.0	90.0	3.0	1.5		
	3750	TYKW	20	GRF	0435.0	0500.0	100.0	2.0	1.0		
	500	HIRA	8	S	0457.7	0457.9	.5	90.0			0
	2000	TYKW	5	S	0522.7	0522.9	0.5	3.0	1.0		
	33	UPIC	42	SER	0547.0	0714.4	259.2				
	29	UPIC	42	SER	0547.5	0907.7	258.7				
	2695	LEAR	47	GB	0553.3	0554.1	1.5	65.0			QL=6 ST=2 TYP=5
	2000	TYKW	20	GRF	0642.0	0648.0	35.0	2.0	1.0		
	410	LEAR	47	GB	0651.1	0651.6	1.0	66.0			QL=6 ST=2 TYP=5
	113	POTS	4	S/F	0713.5	0713.7	.3	1400.0	250.0		III
	410	LEAR	8	S	0806.0	0806.1	.1	11.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0806.0	0806.1	.1	53.0			QL=6 ST=2 TYP=5
	245	LEAR	8	S	2313.8	2313.8	.2	21.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	2329.6	2329.8	.5	18.0			QL=6 ST=2 TYP=3
29	410	LEAR	43	NS	0231.6	0241.6	88.4	17.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	0244.3	0320.3	405.7D	25.0			QL=6 ST=2 TYP=1
	260	ONDR	43	NS	0610.0		30.0D	34.0			
	2000	TYKW	45	C	0015.7	0016.6	3.0	5.0	1.0		
	245	LEAR	8	S	0107.5	0108.5	1.3	9.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0109.1	0109.3	.2	13.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0111.8	0111.8	.5	10.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0116.0	0117.7	7.0	2.0	0.7		
	9400	TYKW	5	S	0117.0	0118.0	7.0	2.0	1.0		
	2000	TYKW	20	GRF	0150.0	0230.0	110.0	1.5	0.7		
	3750	TYKW	21	GRF	0150.0	0230.0	100.0	2.0	1.0		
	3750	TYKW	45	C	0202.0	0209.5	17.0	4.0	1.5		
	610	LEAR	8	S	0510.8	0511.1	.5	18.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0618.6	0618.6	.4	49.0			QL=6 ST=2 TYP=3
	260	ONDR	1	S	1057.6	1057.7	2.0	4.0	3.0		
	260	ONDR	41	F	1340.0	1403.0U	27.0D	16.0			
	245	PALE	47	GB	1810.3	1810.5	.3	110.0			QL=6 ST=2 TYP=5
	3750	TYKW	20	GRF	2255.0	2311.0	50.0	2.0	1.0		
30	2695	PENT	20	GRF	0002.0	0009.0	30.0	17.2	7.4		
	3750	TYKW	21	GRF	0037.0	0043.0	65.0	2.0	1.0		
	3750	TYKW	5	S	0101.0	0102.4	6.0	2.0	0.5		
	2695	LEAR	47	GB	0310.1	0310.1	.2	65.0			QL=6 ST=2 TYP=5
	9400	TYKW	20	GRF	0442.0	0454.0	70.0	10.0	3.5		
	2000	TYKW	21	GRF	0442.0	0510.0	80.0	2.0	1.0		
	2840	PEKG	3	S	0443.0	0444.3	9.0	26.4	3.7		
	3750	TYKW	21	GRF	0443.0	0457.0	70.0	3.0	1.5		
	2000	TYKW	5	S	0443.3	0444.3	2.5	6.0	1.5		
	3750	TYKW	5	S	0444.0	0444.2	2.0	9.0	2.0		
	6100	KISV	1	S	0444.0	0444.2	1.0	3.0			
	2950	GORK	1	S	0444.0	0444.3	1.0	11.0			
	2695	ATHN	8	S	0444.1	0444.3	.5	13.0			QL=5 ST=3 TYP=3
	4995	ATHN	8	S	0444.1	0444.3	.5	9.0			QL=2 ST=2 TYP=3
	2695	LEAR	8	S	0513.3	0513.5	1.0	35.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0547.1	0547.3	.5	32.0			QL=6 ST=2 TYP=3
	3750	TYKW	20	GRF	0630.0	0635.0	45.0	2.0	1.0		
	3750	TYKW	5	S	0741.0	0743.0	15.0	3.0	1.0		
	260	ONDR	41	F	0802.0	0821.0	20.0	26.0			
	2800	OTTA	20	GRF	1105.0	1135.0	90.0	2.6	1.3		
	430	KRAK	8	S	1117.5	1118.0	.7	11.0			
	810	KRAK	8	S	1118.0	1118.0	.1	5.0			
	2800	OTTA	21	GRF	1340.0	1450.0	100.0	4.0	2.0		
	2800	OTTA	1	S	1340.2	1341.0	1.5	2.4	1.2		
	2800	OTTA	21	GRF	1528.0	1700.0	180.0	6.2	3.1		
	2800	OTTA	1	S	1628.3	1628.6	1.0	2.6	1.3		
	3750	TYKW	20	GRF	2130.0	2142.0	35.0	3.0	1.5		
	9400	TYKW	5	S	2138.0	2142.5	14.0	4.0	1.5		
	9400	TYKW	5	S	2222.3	2222.8	2.0	4.0	1.5		
	2800	OTTA	21	GRF	2255.0	0035.0	170.0D	13.6			
	1000	TYKW	28	PRE	2256.0	2352.0	64.0D	5.0	2.5D		
	2000	TYKW	28	PRE	2258.0	2352.0	64.0	8.0	4.0		
	3750	TYKW	5	S	2301.0	0009.0	85.0	23.0	9.0		
	9400	TYKW	20	GRF	2310.0	0010.0	240.0	12.0	6.0		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

MAY 1983

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
30	500	HIRA	45	C	2341.0	0005.0	48.0	23.0	8.0		0
31	2000	TYKW	5	S	0002.0	0009.0	30.0	25.0	17.0D		
	1000	TYKW	45	C	0003.0E	0008.2	28.0D	25.0	13.0D		
	3750	TYKW	30	PBI	0026.0		330.0	14.0	6.0		
	1000	TYKW	29	PBI	0031.0		130.0	2.0	1.0		
	2000	TYKW	29	PBI	0032.0		160.0	7.0	3.5		
	3750	TYKW	5	S	0317.5	0318.4	2.0	1.5	0.5		
	2950	GORK	20	GRF	0320.0	0329.5	73.0	3.3			
	9400	TYKW	45	C	0326.0	0329.3	6.0	8.0	4.0		
	2000	TYKW	20	GRF	0327.0	0329.0	35.0	1.5	0.7		
	3750	TYKW	5	S	0327.0	0329.4	5.0	8.0	4.0		
	9100	GORK	1	S	0328.5	0329.3	1.4	9.2	4.5		
	3750	TYKW	29	PBI	0332.0		65.0	3.0	1.5		
	9400	TYKW	30	PBI	0332.0		35.0	4.0	2.0		
	610	LEAR	8	S	0338.3	0338.6	.3	3.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0338.3	0338.6	.3	18.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0338.3	0338.6	.3	6.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	0344.0	0350.0	20.0	3.0	1.5		
	245	LEAR	8	S	0414.6	0414.8	.2	32.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	0450.0	0450.3	2.0	3.0	1.0		
	3750	TYKW	20	GRF	0453.0	0458.0	30.0	1.5	0.7		
	2000	TYKW	5	S	0455.0	0500.0	20.0	1.5	0.7		
	9400	TYKW	5	S	0507.0	0508.0	11.0	3.0	1.0		
	3750	TYKW	20	GRF	0704.0	0713.0	65.0	2.0	1.0		
	2000	TYKW	20	GRF	0705.0	0711.0	30.0	2.0	1.0		
	9400	TYKW	20	GRF	0708.0	0711.0	35.0	4.0	2.0		
	29	UPIC	45	C	0749.1	0749.2	2.1				
	33	UPIC	45	C	0749.4	0749.4	2.1				
	260	ONDR	41	F	0904.0	0915.0	13.0	8.0			
	11800	BERN	3	S	0942.6	0943.8	17.0	43.0			
	8400	BERN	3	S	0942.6	0943.8	17.0	70.0			
	5200	BERN	3	S	0942.6	0943.8	17.0	53.0			
	9500	POTS	29	PBI	0943.0	0943.8	22.0	45.0			
	9100	GORK	3	S	0943.2	0943.8	4.3	49.0	25.0		
	6100	KISV	3	S	0943.2	0943.9	4.5	31.0			
	4995	ATHN	4	S/F	0943.3	0943.6	2.2	26.0			QL=2 ST=2 TYP=3
	8800	ATHN	4	S/F	0943.3	0943.6	2.2	38.0			QL=6 ST=3 TYP=3
	6100	KISV	29	PBI	0947.7	0948.5	26.0	3.0			
	33	UPIC	45	C	0950.5	0950.7	3.0				
	29	UPIC	45	C	0950.7	0951.0	3.0				
	6100	KISV	1	S	1230.7	1230.9	.5	4.0			
	2800	OTTA	21	GRF	1240.0	1255.0	50.0	4.0	2.0		
	8800	ATHN	4	S/F	1243.5	1247.3	7.0	15.0			QL=6 ST=2 TYP=3
	6100	KISV	46	C	1245.2	1247.4	18.0	11.0			
	3100	BERN	20	GRF	1245.7	1247.4	23.0	17.0			
	5200	BERN	20	GRF	1245.7	1247.4	23.0	23.0			
	8400	BERN	20	GRF	1245.7	1256.6	23.0	28.0			
	2695	ATHN	4	S/F	1246.3	1247.3	6.2	10.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	1246.3	1247.3	4.8	13.0			QL=2 ST=2 TYP=3
	2800	OTTA	2	S/F	1246.5	1247.2	5.0	8.0	4.0		
	6100	KISV			1249.0	1249.3		9.0			
	6100	KISV			1252.0	1252.3		7.0			
	8800	ATHN	8	S	1254.1	1254.6	.9	11.0			QL=6 ST=2 TYP=3
	6100	KISV			1255.1	1255.2		10.0			
	6100	KISV			1348.0	1348.4		14.0			
	6100	KISV	45	C	1348.0	1349.4	3.0	24.0			
	9500	POTS	29	PBI	1348.0	1349.5	32.0	20.0			
	3000	POTS	29	PBI	1348.0	1349.7	32.0	25.0			
	5200	BERN	3	S	1348.1	1349.3	22.0	47.0			
	8400	BERN	3	S	1348.1	1349.3	22.0	42.0			
	3100	BERN	3	S	1348.1	1349.3	22.0	34.0			
	8800	ATHN	4	S/F	1348.1	1349.5	2.4	23.0			QL=6 ST=2 TYP=3
	1415	ATHN	4	S/F	1348.1	1349.6	4.9	7.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	1348.1	1349.6	6.9	18.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	1348.1	1349.6	6.5	38.0			QL=2 ST=2 TYP=3
	2800	OTTA	3	S	1348.5	1350.0	3.5	20.0	8.0		
	4995	SGMR	8	S	1349.0	1349.3	1.0	30.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1349.1	1349.5	1.0	20.0			QL=6 ST=2 TYP=3
	15400	SGMR	8	S	1349.1	1349.5	1.0	10.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1349.1	1349.5	1.0	20.0			QL=6 ST=2 TYP=3

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

MAY 1983

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
31	6100	KISV	29 PBI	1351.3	1351.3	19.0	7.0			
	2800	OTTA	29 PBI	1352.0	1352.0	38.0	7.2	3.6		
	2800	OTTA	23 GRF	1450.0	1840.0	405.0	8.4	3.8		
	2800	OTTA	20 GRF	1457.0	1500.0	45.0	5.2	2.4		
	11800	BERN	21 GRF	1457.5	1459.1	33.0	32.0			
	8400	BERN	21 GRF	1457.5	1459.2	33.0	55.0			
	5200	BERN	21 GRF	1457.5	1459.4	33.0	33.0			
	3100	BERN	21 GRF	1457.5	1459.9	33.0	15.0			
	8800	SGMR	4 S/F	1457.8	1459.1	2.3	48.0			QL=6 ST=2 TYP=3
	4995	SGMR	8 S	1458.3	1459.1	1.7	23.0			QL=6 ST=2 TYP=3
	8800	ATHN	4 S/F	1458.6	1459.1	2.5	34.0			QL=6 ST=3 TYP=3
	4995	ATHN	4 S/F	1458.6	1459.1	2.5	13.0			QL=2 ST=3 TYP=3
	2695	ATHN	4 S/F	1458.6	1459.6	2.5	7.0			QL=6 ST=3 TYP=3
	610	SGMR	8 S	1652.0	1652.8	2.0	16.0			QL=6 ST=2 TYP=3
	245	PALE	8 S	1652.5	1652.6	1.0	48.0			QL=6 ST=2 TYP=3
	245	SGMR	8 S	1652.5	1652.6	1.0	50.0			QL=6 ST=2 TYP=3
	610	PALE	8 S	1652.6	1652.8	.4	17.0			QL=6 ST=2 TYP=3
	245	PALE	8 S	1752.5	1752.6	.3	21.0			QL=6 ST=2 TYP=3
	2800	OTTA	22 GRF	1810.0	1814.9	16.0	12.0	4.0		
	2695	SGMR	20 GRF	1810.6	1814.8	8.5	13.0			QL=6 ST=2 TYP=2
	4995	SGMR	20 GRF	1813.3	1814.6	4.8	24.0			QL=6 ST=2 TYP=2
	8800	SGMR	20 GRF	1813.3	1814.6	1.8	22.0			QL=6 ST=2 TYP=2
	2800	OTTA	20 GRF	2015.0	2018.0	15.0	4.5	1.4		
	245	PALE	8 S	2043.1	2043.3	.5	38.0			QL=6 ST=2 TYP=3
	245	PALE	47 GB	2126.5	2126.6	.5	160.0			QL=6 ST=2 TYP=5
	245	SGMR	47 GB	2126.5	2126.6	.5	150.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	2241.1	2241.5	5.7	370.0			QL=6 ST=2 TYP=5
	410	PALE	47 GB	2241.3	2241.5	.5	53.0			QL=6 ST=2 TYP=5
	2695	PENT	20 GRF	2340.0	2350.0	40.0	2.6	1.4		
	2000	TYKW	20 GRF	2341.0	2351.0	40.0	2.0	1.0		
	3750	TYKW	20 GRF	2342.0	2352.0	45.0	4.0	2.0		
	245	LEAR	47 GB	2351.3	2354.1	3.7	93.0			QL=6 ST=2 TYP=5

Reports are received routinely from the following observatories:

ATHN = Athens
BERN = Berne
BORD = Bordeaux
CRIM = Crimea
DWIN = Dwingeloo
GORK = Gorky
HIRA = Hiraiso
HUAN = Huancayo
IRKU = Irkutsk
IZMI = IZMIRAN
KISV = Kislovodsk
KRAK = Krakow
LEAR = Learmonth
MANI = Manila
NAGO = Nagoya
NOBE = Nobeyama
ONDR = Ondrejov
OTTA = Ottawa
PALE = Palehua
PEKG = Peking
PENT = Penticton
POTS = Potsdam
SAOP = Sao Paulo
SGMR = Sagamore Hill
TORN = Torun
TYKW = Toyokawa
TRST = Trieste
UPIC = Upice
VORO = Voroshilov

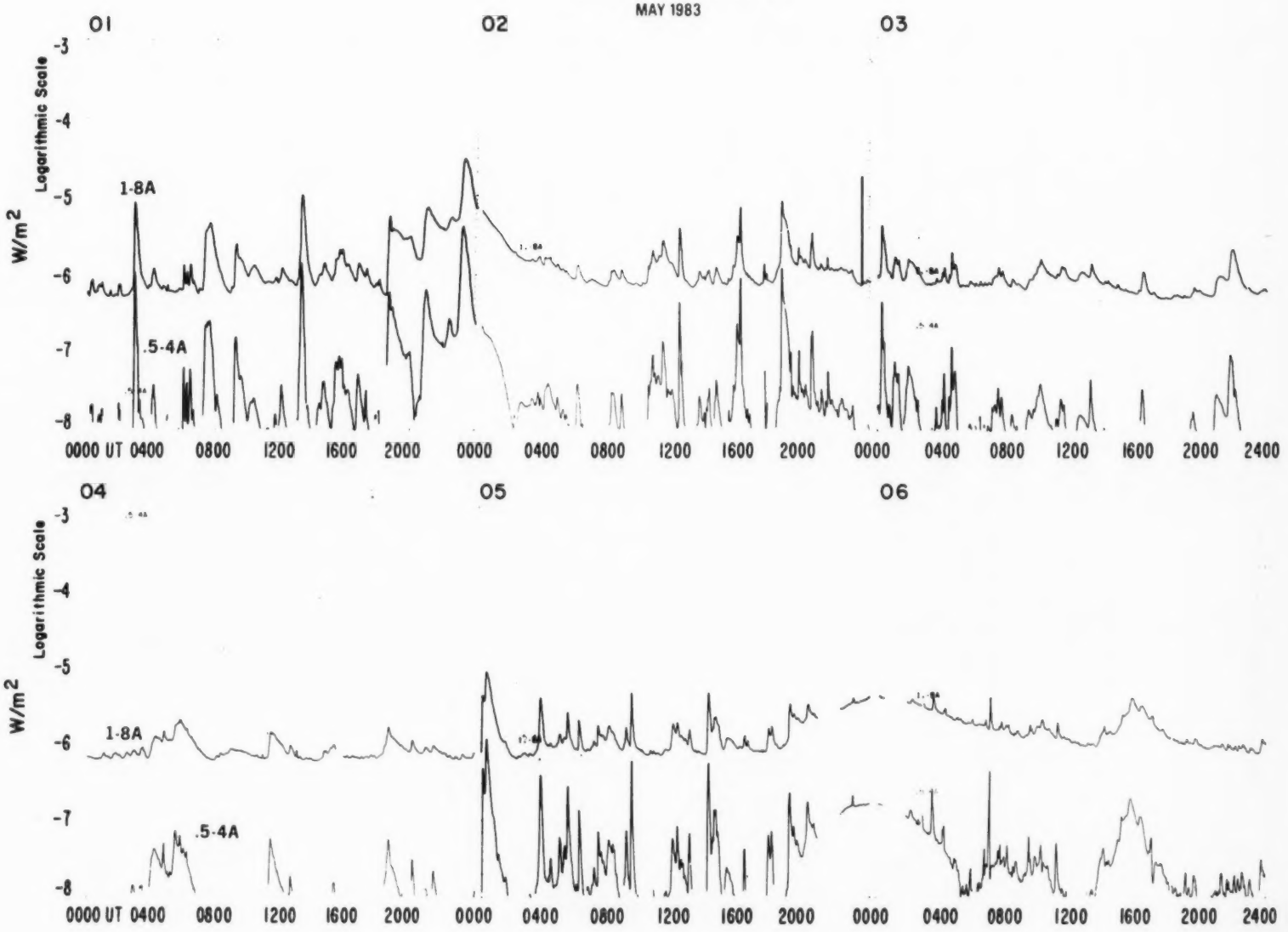
Explanation of Type Code:

1 Simple 1
2 Simple 1F
3 Simple 2
4 Simple 2F
5 Simple
6 Minor
7 Minor +
8 Spike
20 Simple 3
21 Simple 3A
22 Simple 3F
23 Simple 3AF
24 Rise
25 Rise A
26 Fall
27 Rise and Fall
28 Precursor
29 Post Burst Increase
30 Post Burst Increase A
31 Post Burst Decrease
33 Absorption
40 Fluctuation
41 Group of Bursts
42 Series of Bursts
43 Onset of Noise Storm
44 Noise Storm in Progress
45 Complex
46 Complex F
47 Great Burst
48 Major
49 Major +

1A Simple 1A
3A Simple 2A
21A Simple 3A GRF
2A Simple 1AF
4A Simple 2AF
240 Rise only
240F Rise only F
24P Post Rise
24PF Post Rise F
16A Fall A
260 Fall Only
26F Fall F
27F Rise and Fall F
27AF Rise and Fall AF
31A Post Burst Decrease A
32A Absorption A
46F Complex F

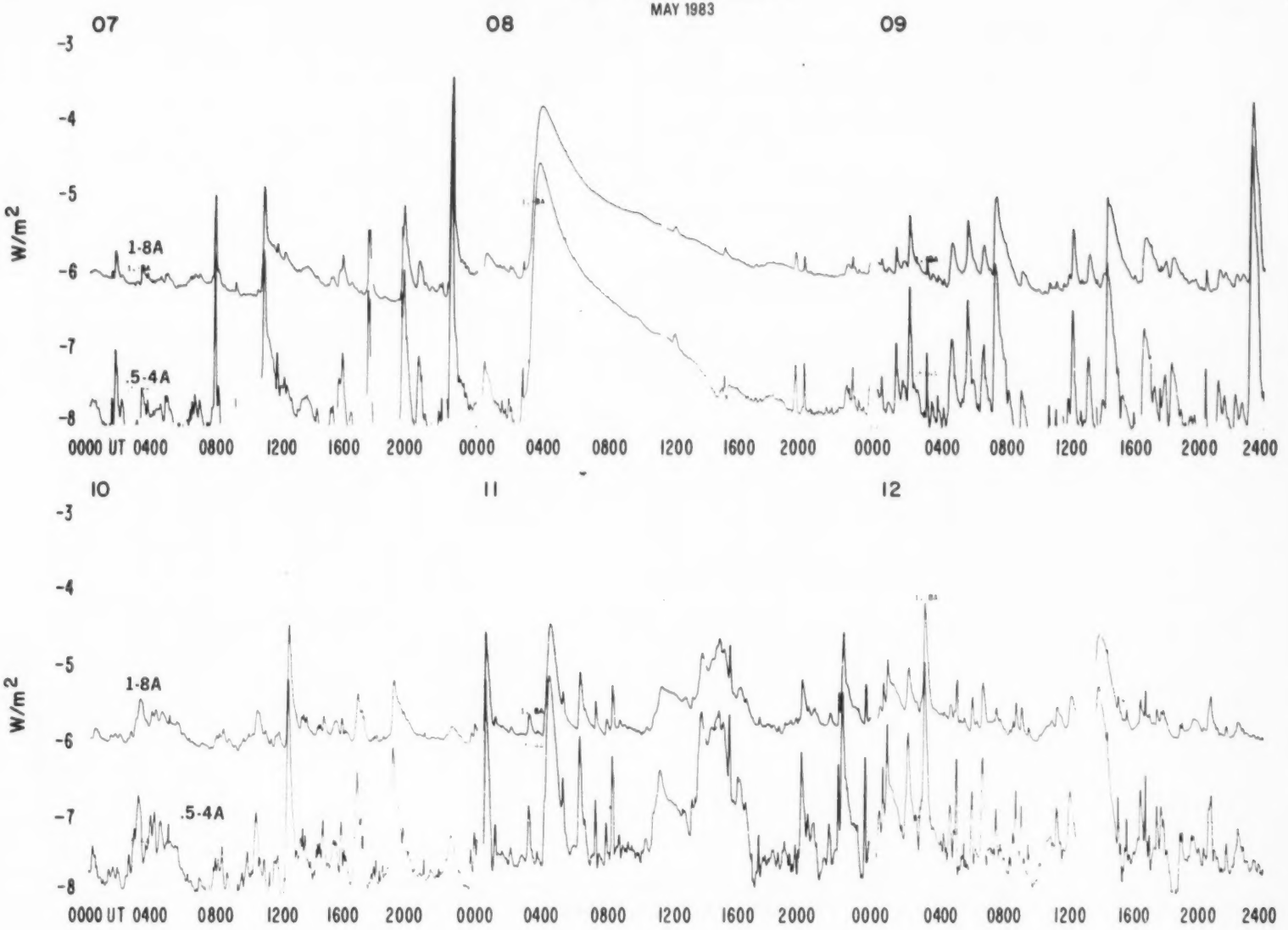
SMS - GOES X-RAYS

MAY 1983



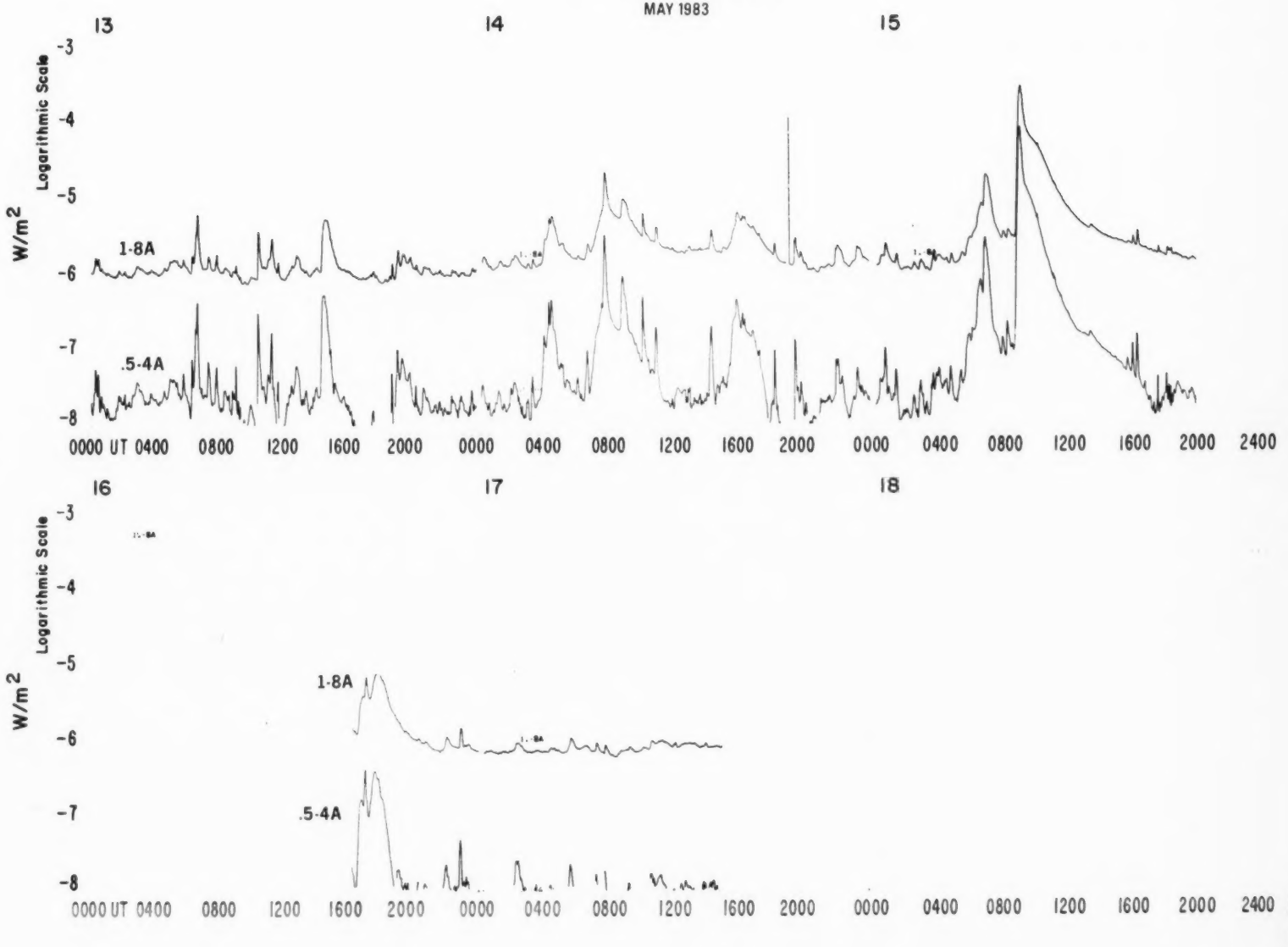
SMS - GOES X-RAYS

MAY 1983



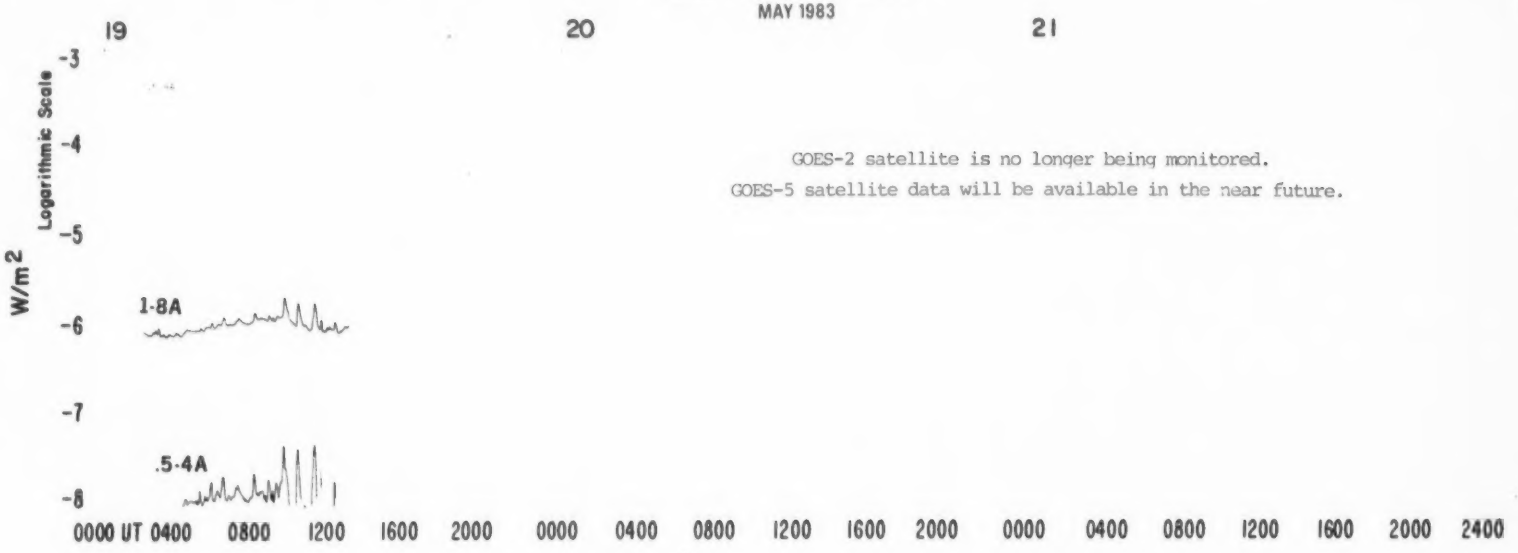
SMS - GOES X-RAYS

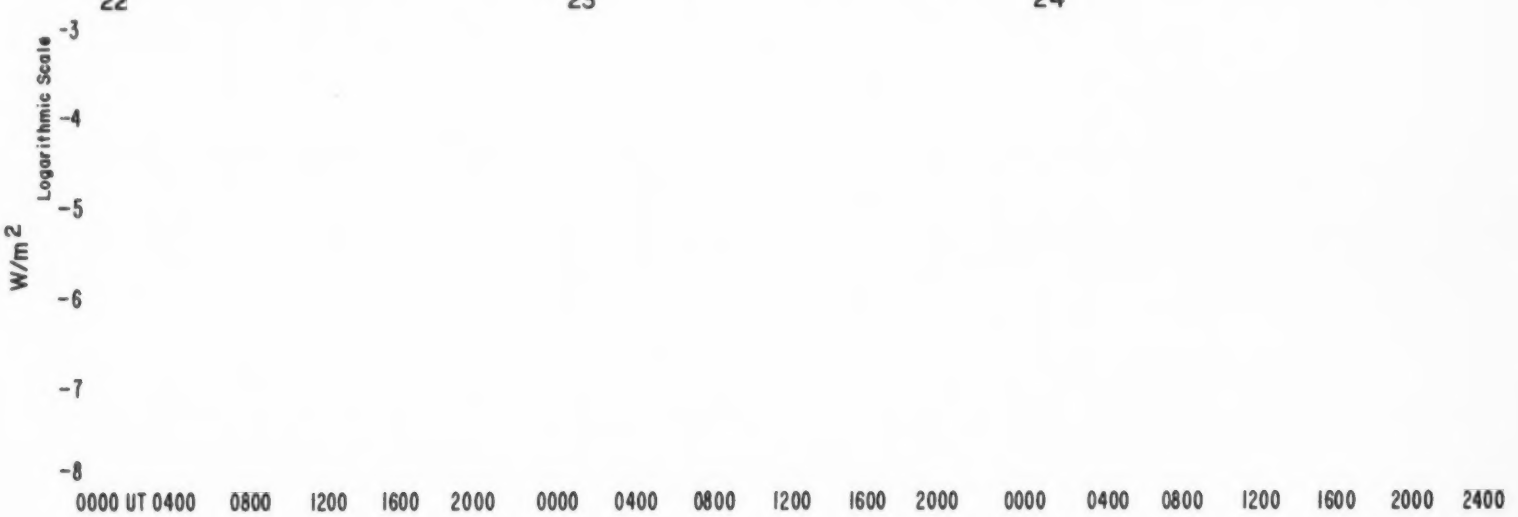
MAY 1983



SMS - GOES X-RAYS

MAY 1983





MASS EJECTIONS FROM THE SUN

MAY 1983

Sta	Day	Observed UT Start	Max	End	Location RA°	R/R$_O$	Freq or Wavelength	Kind of Event
GEOR	May 01	0822 E		0922 D 262	1		H-alpha	S
WEIS	May 01	1441.1		1447.0			Meter	II
GEOR	May 03	0918 E	0937	0958 283	1		H-alpha	S
GEOR	May 05	0730 E		0822 256	1		H-alpha	S
GEOR	May 05	0918 E		0955 105	1		H-alpha	S
GEOR	May 06	0924 E		1004 D 114	1		H-alpha	CB?
GEOR	May 06	0924 E		1004 D 123	1		H-alpha	S
GEOR	May 06	0924 E		1004 D 134	1		H-alpha	CB?
ABST	May 07	0506 E	0508	0518 D 262	0.50		H-alpha	SP
GEOR	May 07	0854 E		0924 D 100	1		H-alpha	CB
CULG	May 07	2216.0		2400.0			Decimeter	IV
CULG	May 07	2219.0		2400.0			Meter	IV
CULG	May 07	2222.0		2257.0			Meter	II Herringbone
SGMR	May 07	2222.1		2238.1			Meter	II
PALE	May 07	2223.1		2237.5			Meter	II
CULG	May 08	0000.0		0136.5			Decimeter; meter	IV
CULG	May 08	0257.0		0410.0			Meter; dekameter	II
LEAR	May 08	0258.3		0311.3			Meter	II
CULG	May 08	0301.0		0333.0			Decimeter	IV Pulsations
CULG	May 08	0305.0		0435.0			Meter	IV
PALE	May 08	0305.0		0314.0			Meter	II
LEAR	May 08	0312.8		0411.6			Meter	IV
CULG	May 09	2304.0		2400.0			Decimeter; meter	IV
CULG	May 09	2307.0		2324.0			Decl; meter; deka	II Herringbone
KHAR	May 10	0938 E		1034 D 235		0.28	H-alpha	S
BLEN	May 10	1208.5		1222.0			Decimeter; meter	IV
WEIS	May 10	1210.2		1215.1			70-260 MHz	II Harmonic
CULG	May 11	0007.5		0012.5			Meter	II
BLEN	May 11	1413.0		1531.0			Decimeter; meter	IV Weak
WEIS	May 11	1424.6		1425.5			60-140 MHz	II Harmonic
LEAR	May 12	0252.8		0402.0			Meter	IV
PALE	May 12	0252.8		0312.5			Meter	IV
CULG	May 12	0253.5		0715.0			Decimeter; meter	IV
CULG	May 12	0254.5		0333.0			Decimeter; meter	II
PALE	May 12	0256.3		0259.3			Meter	II
LEAR	May 12	0256.5		0337.5			Meter	II
ABST	May 13	0610 E	0617	0625 D 264		0.44	H-alpha	SP
KHAR	May 13	0840 E		0848 D 193		0.43	H-alpha	S
KHAR	May 13	0930 E		0950 D 262		0.88	H-alpha	S
KHAR	May 13	1029 E		1046 D 262		0.83	H-alpha	S
KHAR	May 13	1040 E		1048 D 258		0.75	H-alpha	S
GEOR	May 14	0800 E		0822 D 252	1		H-alpha	A?
GEOR	May 15	0720 E	0741	0757 U 256	1		H-alpha	S
BLEN	May 15	0843.8		1050.0			Decimeter; meter	IV
KHAR	May 15	0850 E		1040 D 259		1.00-1.03	H-alpha	S
GEOR	May 15	0923 E	0930 0952 0955	1000 D 256	1		H-alpha	S
KHAR	May 15	1010 E		1028 D 260		0.58	H-alpha	S
GEOR	May 16	0801 E	0811	0926 D 258	1		H-alpha	S?
KHAR	May 17	0916 E		0928 D 310		0.56	H-alpha	S
WEND	May 17	1150	1157	1215 071		1.00	H-alpha	Flare-Loop

MASS EJECTIONS FROM THE SUN

MAY 1983

Sta	Day	Observed UT Start	Max	End	Location RA°	R/R_o	Freq or Wavelength	Kind of Event
CULG	May 18	0230.5		0232.5			Meter	II
GEOR	May 19	0741 E		0908 D	252	1	H-alpha	EL
GEOR	May 19	0800 E		0819	263	1	H-alpha	S
KHAR	May 19	0800 E		0818 D	050	0.80	H-alpha	S
KHAR	May 19	0821 E		0836 D	248	0.87	H-alpha	S
GEOR	May 19	0835 E		0836 U	243	1	H-alpha	S
KHAR	May 19	1030 E		1140 D	055	0.80	H-alpha	S
GEOR	May 22	0812 E		0936 D	266	1	H-alpha	S
GEOR	May 22	0829		0857	263	1	H-alpha	S?
KHAR	May 23	1030 E		1050 D	283	1.00	H-alpha	S
CULG	May 24	0140.0		0156.0			Meter	II Intermittent
KHAR	May 24	0800 E		0828 D	275	1.00	H-alpha	S
KHAR	May 24	0835 E		0840 D	327	0.35	H-alpha	S
BLEN	May 24	1604.9		1610.0			Meter	II
KHAR	May 25	0800 E		0820 D	300	0.52	H-alpha	S
KHAR	May 25	0805 E		0818 D	310	0.54	H-alpha	S
KHAR	May 25	0850 E		0908 D	148	0.33	H-alpha	S
KHAR	May 25	0947 E		1010 D	098	1.00-1.13	H-alpha	SP
WEIS	May 25	0955.5		1000.5			60-160 MHz	II Harmonic
CULG	May 25	2332.0		2337.0			Meter	II
ABST	May 30	0437	0450	0519	255	1.00	H-alpha	SP
ABST	May 30	0438	0441	0519	258	1.00	H-alpha	SP
GEOR	May 30	0800 E		0955 D	288	1	H-alpha	S
GEOR	May 30	0800 E		0955 D	285	1	H-alpha	CB?
CULG	May 30	2315.5		2338.5			Meter	II Weak
KHAR	May 31	0818 E		0830 D	100	0.77	H-alpha	S
KHAR	May 31	1008 E		1027 D	100	0.77	H-alpha	S

QUALIFIERS ON START, MAX AND END TIMES
D = event ended after tabulated time
E = event began before the tabulated time
U = uncertain time

TYPE OF EVENT
A = eruptive active region prominence
CB = coronal cloud bubble
D = coronal depletions
E = coronal enhancement
EL = coronal expanding loop
II = Type II radio burst
IVm = moving Type IV radio burst
Q = eruptive quiescent prominence
R = coronal ray or streamer
S = flare-surge if there is a known flare association
SP = flare-spray if there is a known flare association
* = movement may be caused by ionospheric refraction

REPORTING STATIONS
ABST = Abastumani
BLEN = Blelen
CULG = Culgoora
GEOR = Georgiana
KHAR = Kharkov
LEAR = Learmonth
PALE = Palehua
SGMR = Sagamore Hill
WEIS = Weissenau
WEND = Wendelstein

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